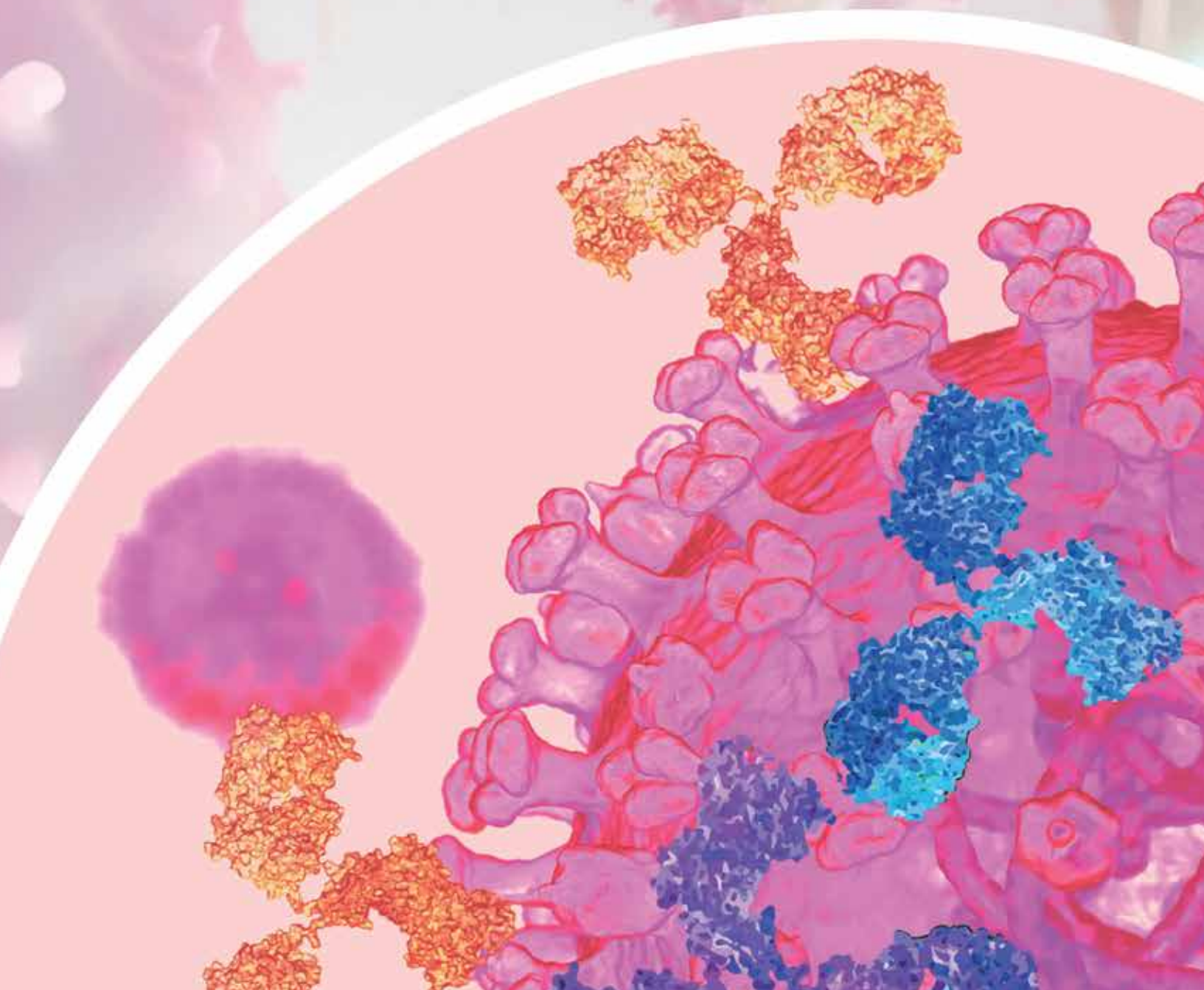


Advancing Antibody Drug Innovation and Development with Innovative Solutions



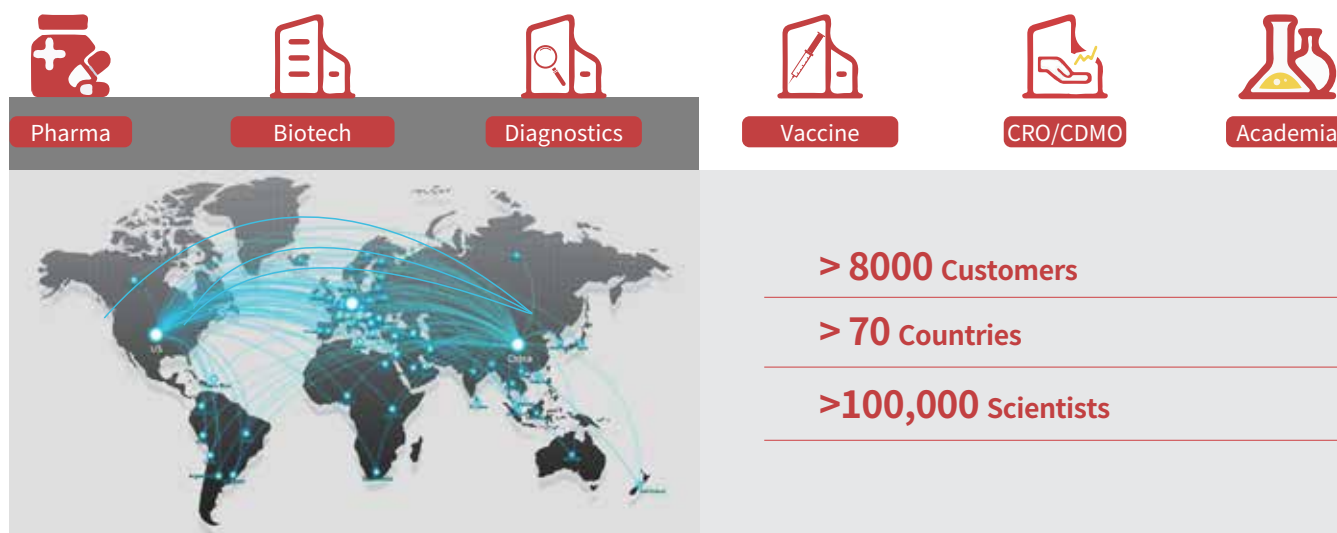
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About ACROBiosystems

ACROBiosystems Group (Stock code: 301080) founded in 2010 and listed in 2021, is a biotechnology company aimed at being a cornerstone of the global biopharmaceutical and health industries by providing products and business models innovation. The company spans across the globe and maintains offices, R&D centers, and production bases in 12 different cities within the United States, Switzerland, England and Germany. ACROBiosystems Group has established numerous long-term and stable partnerships with the world's top pharmaceutical enterprises, including Pfizer, Novartis, and Johnson & Johnson, and numerous well-known academic institutes. The company comprises of several subsidiaries such as ACROBiosystems, bioSeedin, Condense Capital, and ACRODiagnostics.

Our Customers

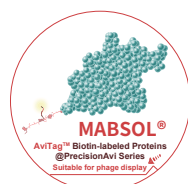


Our Advantages

Better Design

Application-oriented development strategies

- Over 95% of proteins are produced from HEK293 to ensure native conformation of our proteins
- Six guaranteed technology platforms including multi-pass transmembrane proteins, next-generation fluorescent site-directed labeling, and enzymology
- Dedicated research & development brands including ActiveMax, GENPower, ViruStop, etc.
- Custom products according to customer application requirements



Better Quality

Strict quality control systems

- Strict quality and production process control
- Validated analytical methodologies
- DMF (FDA) filings for recombinant protein products
- ISO9001 and ISO13485 certified
- GMP quality management system
- CNAS-accredited SPR testing services available

Better Support

24h Technical support and free resources

- 24-hour technical support on weekdays
- Free protocols on bioactivity validation
- Open-access marketing information & training resources
- Resources for monitoring clinical progress and market dynamics
- Comprehensive regulatory support documentation
- Extensive collaborations with our partners



Better Customer Experience

Customers come first

- 1 to 5-day global shipping
- Real-time, online support or local customer support available
- Custom services available according to customer demands
- Inventory reservation system to reserve the same batch or lot



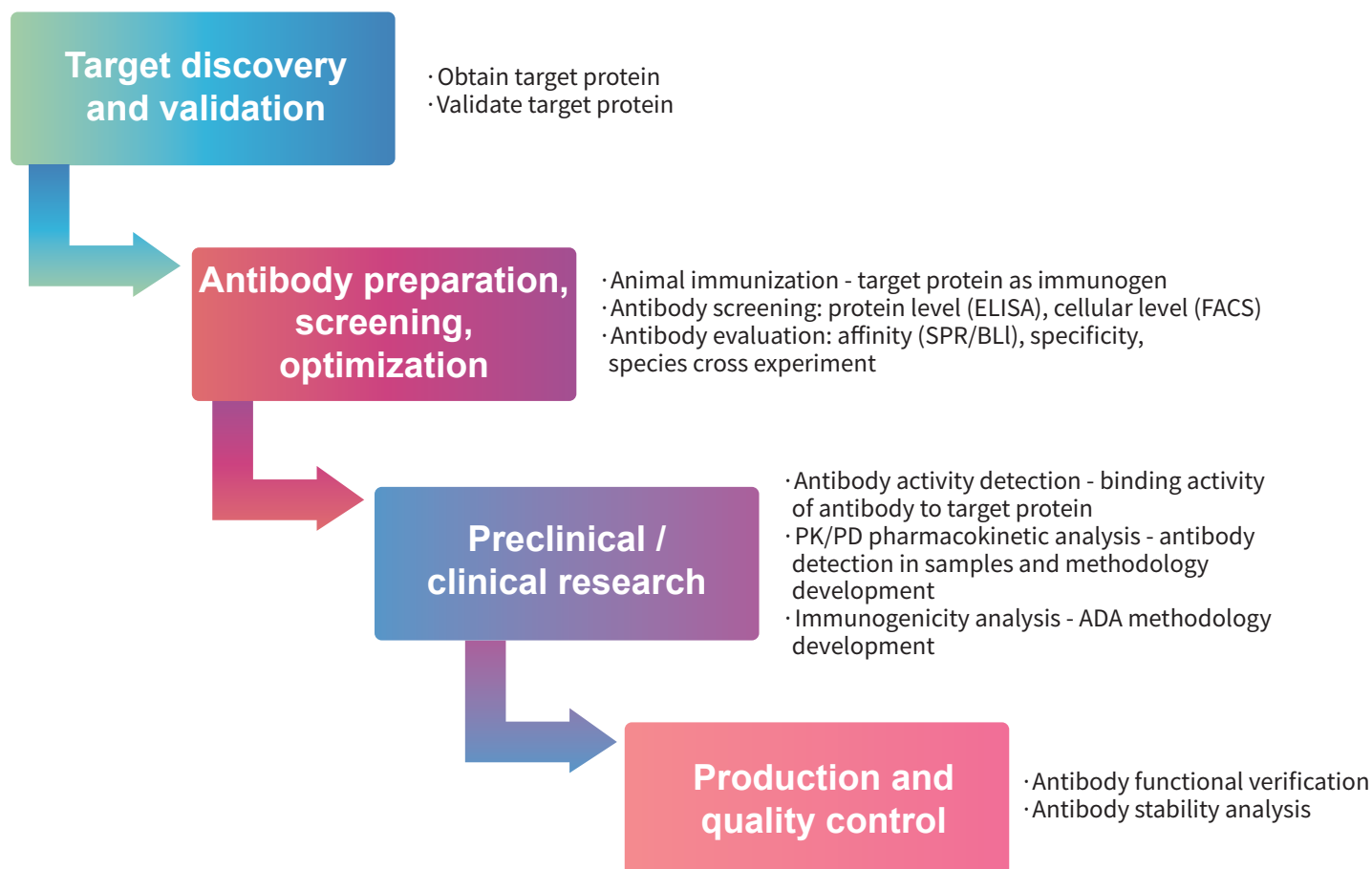
2

The Role of Antibody Drugs in Modern Healthcare: Specificity, Effectiveness, and Versatility

Antibody drugs have emerged as prevalent treatments in healthcare due to their remarkable specificity and effectiveness in targeting various diseases. These drugs, also known as monoclonal antibodies, are engineered to bind to specific proteins or antigens involved in diseases, such as cancers, autoimmune disorders, and infectious diseases. Their specificity allows for precise targeting, reducing the likelihood of harming healthy cells and minimizing adverse effects commonly associated with traditional therapies. Moreover, antibody drugs have demonstrated exceptional potency in modulating the immune system, either by stimulating it to fight diseases more effectively or by blocking specific pathways that contribute to disease progression. Their versatility and adaptability in being tailored to various targets make them a valuable therapeutic option. Additionally, their ability to be produced through recombinant DNA technology in laboratories ensures a consistent and reliable supply, contributing to their widespread availability and utilization in modern healthcare, significantly improving patient outcomes and quality of life.



Overview of antibody drug development





Total Solutions for Antibody drug development

Discovery & Development

The discovery and development of antibody drugs are crucial for biopharmaceuticals. They offer targeted treatments by recognizing and binding to specific targets, such as pathogens or cancer cells. Antibody drugs have the potential to revolutionize healthcare by providing precise and effective therapies for various diseases, improving patient outcomes.

■ Immunization

Immunization is when target antigens along with the selection of an appropriate animal model (such as mouse, llama, or rabbit) are used to prepare specified antibodies with a strong specificity, high affinity, and high titer against the selected antigen. The selection of an appropriate immunological regimen is critical to the success of cell fusion hybridization and the subsequent production of high-quality antibodies.

Target Proteins

ACROBiosystems is tight controls the design, expression, and production of recombinant proteins, using a unique technology platform to develop and design more than 1,300 target proteins. Our target protein products cover different species (such as Human, Mouse, Cynomolgus, Rhesus macaque, Rat, Rabbit, Canine, etc.) and provide different tags (such as His, Fc, mFc, Llama Fc, Avi, Flag, GST, Strep, etc.) and labeled products. The molecular weight of the products was verified by SEC-MALS/SDS-PAGE. Strict quality control standards were followed to ensure that the product properties were more uniform and the difference between batches was smaller. At the same time, the activity of the product has been verified by ELISA, SPR, BLI, flow cytometry, etc., which accelerates the development of antibody drugs.

Featured Protein Targets

Scan the QR code for more product information

FLAG Transmembrane Proteins

Claudin Family Proteins
Full Length CD20 Proteins
GPCRs Family Proteins



Immune Checkpoint Proteins

PD-1, PD-L1, CTLA-4
LAG-3, LILRBs
CD28, LILRAs



Cytokine Targets

Interleukin Family Proteins
VEGF Proteins
IGF Family Proteins





Overexpression Cell Lines



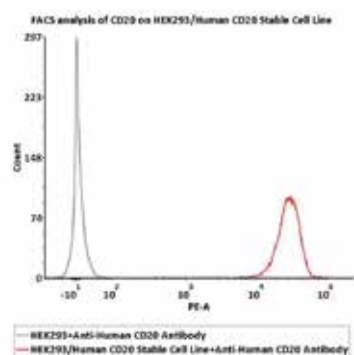
Overexpression stable cell lines are a genetically modified stable cell line designed to continuously overexpress a specific gene. A specific gene is designed to increase the expression level and subsequently introduced into cells using methods such as lentiviruses and electroporation to achieve 'Gain-of-Function'. The resulting cell then expresses the target antigen on the cell membrane surface, a function which is retained across multiple cell passages.

Product List

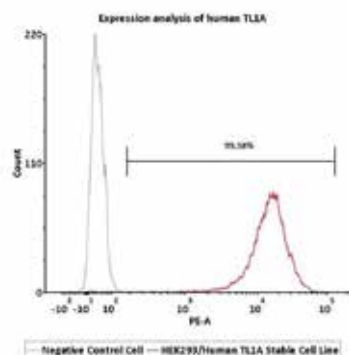
Molecule	Cat. No.	Product Description
TROP-2	CHEK-ATP036	HEK293/Human TROP-2 Stable Cell Line
TrkB	CHEK-ATP082	HEK293/Human TrkB Stable Cell Line
Transferrin R	CHEK-ATP089	HEK293/Human Transferrin R Stable Cell Line
TMPRSS2	CHEK-ATP101	HEK293/Human TMPRSS2-HA-P2A-mGFP Stable Cell Line
Tau	CHEK-ATP087	HEK293/Human Tau-K18 (GFP) Stable Cell Line
STEAP1	SCCHO-ATP121	CHO/Human STEAP1 Stable Cell Line
ROR1	CHEK-ATP084	HEK293/Human ROR1 Stable Cell Line
PD-L1	CHEK-ATP002	HEK293/Human PD-L1, GFP Tag Stable Cell Line
PD-L1	SCCHO-ATP077H	CHO/Human PD-L1 Stable Cell Line (High Expression)
PD-L1	SCCHO-ATP077L	CHO/Human PD-L1 Stable Cell Line (Low Expression)
PD-L1	SCCHO-ATP077M	CHO/Human PD-L1 Stable Cell Line (Medium Expression)
PD-L1	SCRAJ-STT075	Raji/Human PD-L1 Stable Cell Line
PD-1	CHEK-ATP001	HEK293/Human PD-1, GFP Tag Stable Cell Line
OX40 Ligand	CHEK-ATP054	HEK293/Human OX40 Ligand / TNFSF4 Stable Cell Line
OX40	CHEK-ATP053	HEK293/Human OX40 / TNFRSF4 / CD134 Stable Cell Line
NY-ESO-1	CHEK-STP114	NY-ESO-1 specific TCR-HEK293 cell line

Molecule	Cat. No.	Product Description
Nectin-4	CHEK-ATP035	HEK293/Human Nectin-4 Stable Cell Line
Mesothelin	CHEK-ATP119	HEK293/Human Mesothelin Stable Cell Line
IGF-1 R	CNIH-ATP102	NIH-3T3/Human IGF-1 R Stable Cell Line
GPRC5D	CCHO-STP058	CHO/Human GPRC5D Stable Cell Line
GPRC5D	CHEK-STP042	HEK293/Human GPRC5D Stable Cell Line
GPC3	CHEK-ATP092	HEK293/Human Glypican-3 (GPC3) Stable Cell Line
GPC3	SCCHO-ATP112	CHO/Human Glypican-3 (GPC3) Stable Cell Line
FOLR1	CHEK-ATP091	HEK293/Human FOLR1 Stable Cell Line
FcRn (FCGRT & B2M)	CHEK-ATP079	HEK293/Human FcRn (FCGRT & B2M) Stable Cell Line
Fc gamma RIIIA / CD16a	SCCHO-ATP059H	CHO/Human CD16a (158V) Stable Cell Line (High Expression)
Fc gamma RIIIA / CD16a	SCCHO-ATP059L	CHO/Human CD16a (158V) Stable Cell Line (Low Expression)
Fc gamma RIIIA / CD16a	SCCHO-ATP059M	CHO/Human CD16a (158V) Stable Cell Line (Medium Expression)
Fc gamma RIIb / CD32b	SCCHO-ATP060H	CHO/Human CD32b Stable Cell Line (High Expression)
Fc gamma RIIb / CD32b	SCCHO-ATP060L	CHO/Human CD32b Stable Cell Line (Low Expression)
Fc gamma RIIb / CD32b	SCCHO-ATP060M	CHO/Human CD32b Stable Cell Line (Medium Expression)
Fc gamma RIIa / CD32a	SCCHO-ATP061H	CHO/Human CD32a Stable Cell Line (High Expression)
Fc gamma RIIa / CD32a	SCCHO-ATP061L	CHO/Human CD32a Stable Cell Line (Low Expression)
Fc gamma RIIa / CD32a	SCCHO-ATP061M	CHO/Human CD32a Stable Cell Line (Medium Expression)
Fc gamma RI / CD64	SCCHO-ATP062H	CHO/Human CD64 Stable Cell Line (High Expression)
Fc gamma RI / CD64	SCCHO-ATP062L	CHO/Human CD64 Stable Cell Line (Low Expression)
Fc gamma RI / CD64	SCCHO-ATP062M	CHO/Human CD64 Stable Cell Line (Medium Expression)
DLL3	CHEK-ATP090	HEK293/Human DLL3 Stable Cell Line
Claudin-18.2	CHEK-ATP033	HEK293/Human Claudin-18.2 Stable Cell Line
CEACAM5	CHEK-ATP083	HEK293/Human CEACAM5 Stable Cell Line
CD3	CHEK-ACD080	HEK293/Human CD3E & CD3D & CD3G & CD3Z Stable Cell Line
CD20	CHEK-ATP034	HEK293/Human CD20 Stable Cell Line
CD19	CHEK-ATS056	HEK293/Human Anti-CD19 Stable Cell Line
CD155	SCRAJ-STT076	Raji/Human CD155 Stable Cell Line
CCR5	CHEK-ATP043	HEK293/Human CCR5 Stable Cell Line
BTLA	SCCHO-ATP110	CHO/Human BTLA Stable Cell Line
ASGR1	CHEK-ATP080	HEK293/Human ASGR1 Stable Cell Line
APP	CHEK-ATP081	HEK293/Human APP (GFP) Stable Cell Line
Alpha-synuclein	CHEK-ATP085	HEK293/Human Alpha-synuclein (GFP) Stable Cell Line
4-1BB Ligand	CHEK-ATP039	HEK293/Human 4-1BB Ligand / TNFSF9 Stable Cell Line
4-1BB	CHEK-ATP038	HEK293/Human 4-1BB / TNFRSF9 Stable Cell Line
-	CHEK-SP01	HEK293 Cell Line

Featured Data



FACS assay shows that Monoclonal Anti-Human CD20 Full Length Antibody, Human IgG1 can bind to HEK293/Human CD20 Stable Cell Line. HEK293/Human CD20 Stable Cell Line was red line, Negative control HEK293 cells was grey line (QC tested).



Expression analysis of human TL1A on HEK293/Human TL1A Stable Cell Line by FACS. Cell surface staining was performed on HEK293/Human TL1A Stable Cell Line or negative control cell using anti-human TL1A Antibody followed by staining with PE anti-human IgG Fc Antibody.



Scan the QR code for more product information

■ Antibody Screening

Antibody screening and optimization is an important step towards identifying key candidate therapeutic antibodies. At the present, the conventional technologies widely used include hybridoma technology, antibody library screening technology, B cell cloning technology and others. Common methods to evaluate therapeutic antibodies include ELISA and FACS level binding and blocking, SPR/BLI affinity detection, and more.

Target Proteins

The target proteins serve as the targets for antibody screening, enabling the selection of potential therapeutic candidates through antibody screening. We offer a wide range of target proteins that undergo strict quality control, meeting your research needs. Whether you require target proteins, antibodies, or other related products, we provide comprehensive support to accelerate drug development progress.

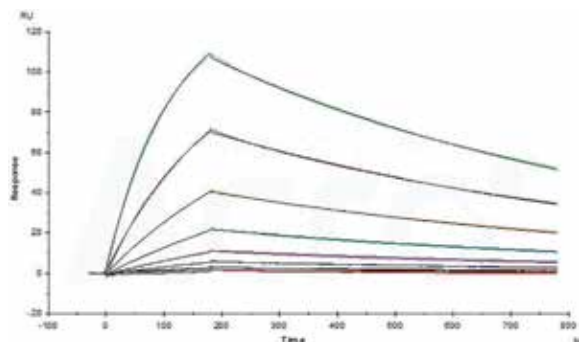
Featured Product

FLAG Transmembrane Proteins

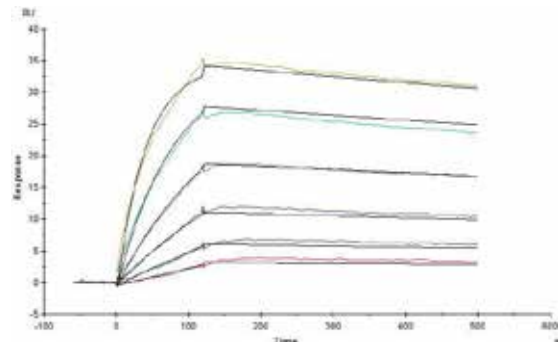
Cytokine Target Proteins

CD3 Proteins

Featured Data




Erbitux (Cetuximab) captured on CM5 chip via anti-human IgG Fc antibodies surface, can bind Human EGF R, His Tag (Cat. No. **EGR-H5222**) with an affinity constant of 1.3 nM as determined in a SPR assay (Biacore T200).



Human Claudin-18.2 Full Length Protein-VLP (Cat. No. **CL2-H52P7**) captured on CM5 Chip via Anti-Claudin-18.2 antibody can bind Anti-Claudin-18.2 antibody with an affinity constant of 0.374 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

>>More Related Information: (P03)

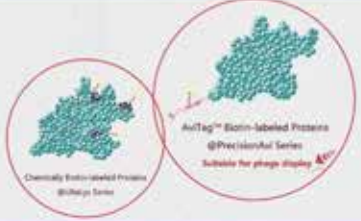
Biotin-labeled Target Proteins



- Closest to Natural Conformation and Modification
- High Bioactivity & Detection Sensitivity
- High Batch-to-Batch Consistency

MABSOL® Biotinylated Proteins

Bring pre-labeled biotinylated proteins directly to your bench



We offer exclusive MABSOL® biotin-labeled proteins, pre-labeled and validated for enhanced antibody screening. Our collection includes over a hundred commonly used drug targets and biomarker proteins. With high-quality proteins, we optimize each step for maximum biological activity and detection sensitivity. Trust our biotinylated proteins to streamline workflows, ensuring accurate and stable results for efficient antibody.

Applications



ELISA



FACS



BIOPANNING



SPR

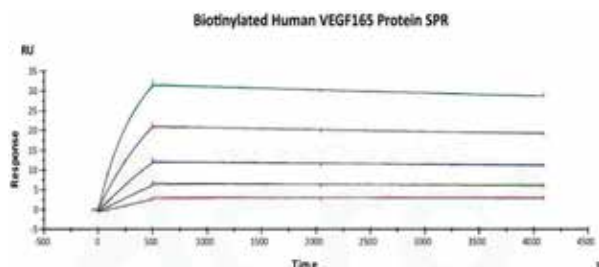


BLI

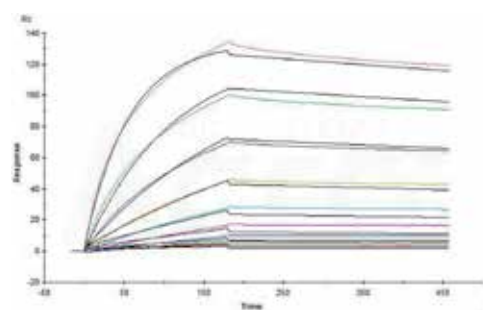


ENRICHMENT

Featured Data



Immobilized biotinylated human VEGF165 (Cat. No. **VE5-H82Q0**) on CM5 Chip via streptavidin, can bind Avastin with an affinity constant of 0.417nM as determined in SPR assay (Biacore T200).



Ofatumumab captured on CM5 chip via anti-human IgG Fc antibody can bind Cynomolgus CD20 Full Length, His Tag (Cat. No. **CD0-C52H8**) with an affinity constant of 3.51 nM as determined in a SPR assay (in presence of DDM and CHS) (Biacore T200) (Routinely tested).

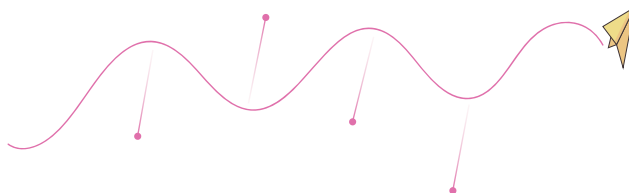


Scan the QR code for more product information

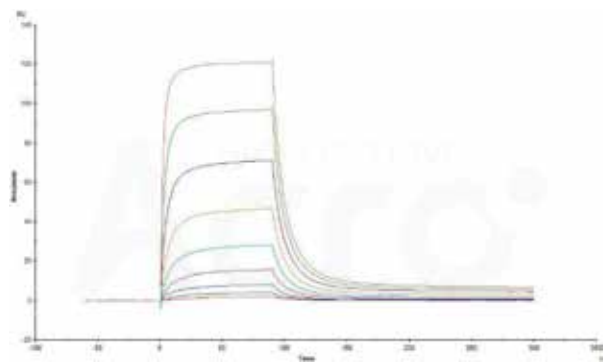
Supercharge antibody screening with our Fc receptor proteins! Enhance your experiments and select optimal candidates quickly. Our Fc receptor proteins offer high affinity, specificity, stability, and ease of use. They bind to antibody Fc regions, ensuring the identification of high-affinity antibodies with specific properties. Whether it's monoclonal antibody screening or affinity maturation, our Fc receptor proteins provide reliable support, accelerating the process and helping you choose the best antibodies.

Featured Product

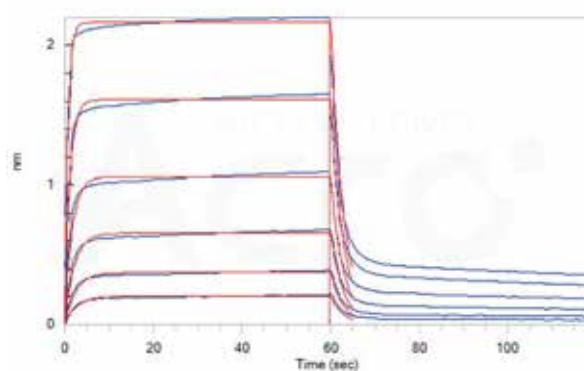
To support monoclonal antibody, bispecific antibody, ADC drug affinity research and targeted FcRn drug development for the treatment of autoimmune diseases, ACROBiosystems is providing you with a series of high-quality FcRn proteins.



Featured Data



Biotinylated Mouse CD64, His, Avi tag (Cat. No. **CD4-M82E7**) captured on Biotin CAP - Series S sensor Chip can bind Herceptin with an affinity constant of 59.8 nM as determined in a SPR assay (Biacore T200) (QC tested).



Loaded Biotinylated Cynomolgus CD32a, His, Avi tag (Cat. No. **CDA-C82E5**) on SA Biosensor, can bind MabThera® (Rituximab) with an affinity constant of 2 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested) determined in a SPR assay (Biacore T200) (QC tested).



Scan the QR code for more product information

Overexpression Cell Lines

Overexpression stable cell lines are a genetically modified stable cell line designed to continuously overexpress a specific gene. A specific gene is designed to increase the expression level and subsequently introduced into cells using methods such as lentiviruses and electroporation to achieve 'Gain-of-Function'. The resulting cell then expresses the target antigen on the cell membrane surface, a function which is retained across multiple cell passages.

Featured Product

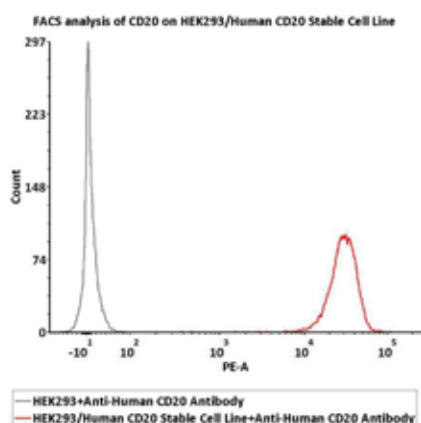
HEK293/Human TL1A Stable Cell Line

HEK293/Human Integrin alpha V beta 6 Stable Cell Line

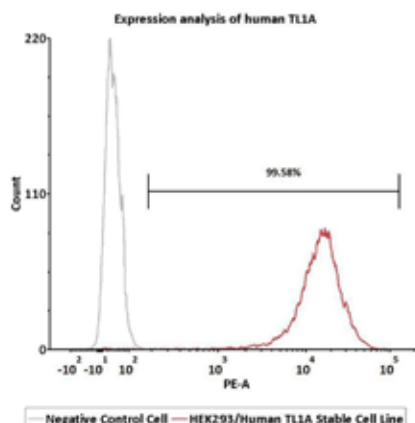
HEK293/Human CD20 Stable Cell Line

HEK293/Human Transferrin R Stable Cell Line

Featured Data



FACS assay shows that Monoclonal Anti-Human CD20 Full Length Antibody, Human IgG1 can bind to HEK293/Human CD20 Stable Cell Line. HEK293/Human CD20 Stable Cell Line was red line, Negative control HEK293 cells was grey line (QC tested).



Expression analysis of human TL1A on HEK293/Human TL1A Stable Cell Line by FACS. Cell surface staining was performed on HEK293/Human TL1A Stable Cell Line or negative control cell using anti-human TL1A Antibody followed by staining with PE anti-human IgG Fc Antibody.

>>More Related Information: (P04)



Inhibitor Screening Kit

Enhancing Antibody Drug Discovery

- Accurate & Reliable
- 96 Test & 4-step ELISA
- Minimal Matrix Effects
- High Repeatability

Supercharge antibody screening with our inhibitor screening Kits! Discover potent inhibitors quickly, optimizing antibody performance. Our flexible kits adapt to various experiments, ensuring reliable results. Unlock antibody potential for functional modification or therapeutic research. Whether for antibody functional modification or therapeutic research, our inhibitor screening assay kit provides robust support to unlock antibody potential and improve screening results.

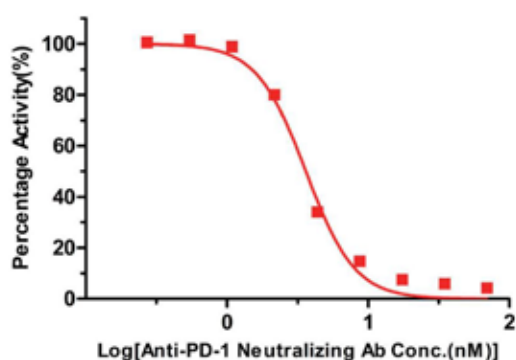
Product List

Cat. No.	Product Description	Detection mechanism
EP-101	PD-1 [Biotinylated] : PD-L1 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-102	CD47: SIRP alpha [Biotinylated] Inhibitor Screening ELISA Assay Pair	Colorimetric assay
EP-103	PCSK9 [Biotinylated] : LDL R Inhibitor Screening ELISA Assay Pair	Colorimetric assay
EP-116	B7-1 [Biotinylated] : CTLA-4 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-117	B7-2 [Biotinylated] : CTLA-4 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-118	BCMA [Biotinylated] : BAFF Inhibitor Screening ELISA Kit	Colorimetric assay
EP-119	BAFFR [Biotinylated] : BAFF Inhibitor Screening ELISA Kit	Colorimetric assay
EP-120	PD-1 [Biotinylated] : PD-L2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-121	CD27L [Biotinylated] : CD27 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-122	PVRIG : Nectin-2 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-125	CTLA-4 [Biotinylated] : B7-1 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-126	CTLA-4 [Biotinylated] : B7-2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-127	BCMA [Biotinylated] : APRIL Inhibitor Screening ELISA Kit	Colorimetric assay
EP-128	IL-5[Biotinylated]:IL-5Ra Inhibitor Screening ELISA Kit	Colorimetric assay
EP-129	TSLP[Biotinylated]:IL-7Ra & TSLP R Inhibitor Screening ELISA Kit	Colorimetric assay
EP-130	PD-1 : PD-L1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-131	TIGIT : CD155 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-132	IL-4 [Biotinylated] : IL-4Ra Inhibitor Screening ELISA Kit	Colorimetric assay
EP-133	PD-L1 : PD-1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-134	PD-L1 [Biotinylated] : B7-1 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-135	CD30 [Biotinylated] : CD30L Inhibitor Screening ELISA Kit	Colorimetric assay
EP-137	VEGFA : VEGFR2 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-138	CD47[Biotinylated] : SIRP alpha Inhibitor Screening ELISA Kit	Colorimetric assay
EP-139	IL-17A[Biotinylated] : IL-17RA Inhibitor Screening ELISA Kit	Colorimetric assay
EP-140	IL-17A : IL-17RA [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-141	VEGFA [Biotinylated] : VEGFR2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-142	IL-4Ra[Biotinylated] : IL-4 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-143	TNF-alpha [Biotinylated] : TNFR1 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-144	TNFSF11 : RANK Inhibitor Screening ELISA Kit	Colorimetric assay
EP-145	TNFSF11 : Osteoprotegerin Inhibitor Screening ELISA Kit	Colorimetric assay
EP-146	IL-6[Biotinylated] : IL-6 R alpha Inhibitor Screening ELISA Kit	Colorimetric assay
EP-147	TNF-alpha [Biotinylated] : TNFR2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-148	LIGHT : HVEM[Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-149	IL-13RA2 [Biotinylated] : IL-13 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-150	CD28 : B7-1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-151	CD28 : B7-2 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay

Cat. No.	Product Description	Detection mechanism
EP-152	CD47 [Biotinylated] : SIRP alphaV2 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-153	LIGHT : LTBR [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-154	PD-1 : PD-L2 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-155	Integrin $\alpha 4 \beta 7$: MAdCAM-1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-156	IL-12B : IL-12RB1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-157	Mouse PD-L1 : Mouse PD-1 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-158	PD-L1 [Biotinylated] : PD-1 Inhibitor Screening ELISA Kit	Colorimetric assay
EP-159	IL-11 : IL-11R [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-160	CD47 : SIRP gamma [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-161	TNF-alpha : TNFR2 [Biotinylated] Inhibitor Screening ELISA Kit	Colorimetric assay
EP-162	OX40 [Biotinylated] : OX40 Ligand Inhibitor Screening ELISA Kit	Colorimetric assay
EP-164	GDF15 [Biotinylated] : GFRAL Inhibitor Screening ELISA Kit	Colorimetric assay

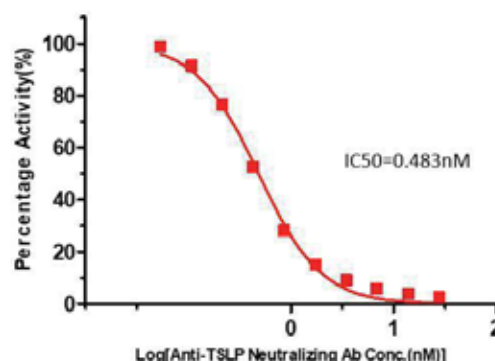
Featured Data

★ Cat. No. EP-101



Anti-PD-1 neutralizing antibody was diluted from 10 $\mu\text{g/mL}$ to 0.078 $\mu\text{g/mL}$ (69.628 nM to 0.544 nM) and loaded onto the plate coated by human PD-L1 in the presence of human PD-1-Biotin. Assay was performed according to the protocol in PD-1[Biotinylated] : PD-L1 Inhibitor Screening ELISA Assay Pair. The background was subtracted from data points prior to log transformation and curve fitting (QC tested).

★ Cat. No. EP-129



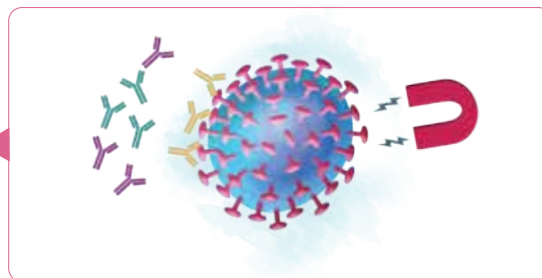
Serial dilutions of Anti-TSLP Neutralizing antibody (Catalog # EP129-C03) (1:1 serial dilution, from 8 $\mu\text{g/mL}$ to 0.0156 $\mu\text{g/mL}$ (55.317-0.108 nM)) was added into IL-7 R alpha & TSLP R: TSLP-Biotin binding reactions. The assay was performed according to the above-described protocol. The background was subtracted from data points prior to log transformation and curve fitting (QC tested).



Scan the QR code for more product information

Biotinylated Protein-coupled Magnetic Beads

Our developed pre-conjugated magnetic beads feature a unique biotinylated protein coupled to streptavidin-coated beads, enabling binding to other biological ligands. With uniform size, high surface area, and saturated antigen coating, these beads exhibit excellent performance, ensuring enhanced capture efficiency and reproducibility. Whether monoclonal antibody screening or affinity selection, our beads provide robust support for efficient antibody discovery.

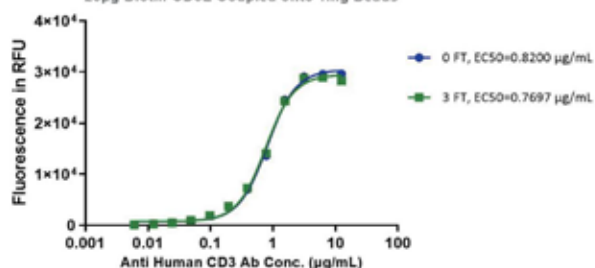


Product List

Molecule	Cat. No.	Product Description
CD3 epsilon	MBS-K026	Human CD3E-coupled Magnetic Beads
CD3E & CD3D	MBS-K003	Human CD3E & CD3D Heterodimer-coupled Magnetic Beads
VEGF165	MBS-K036	Human VEGF165-coupled Magnetic Beads
CTLA-4	MBS-K042	Human CTLA-4 coupled Magnetic Beads
CD47	MBS-K023	Human CD47-coupled Magnetic Beads
Her2	MBS-K006	Human HER2-coupled Magnetic Beads
Mesothelin	MBS-K024	Human Mesothelin-coupled Magnetic Beads
EGFRvIII	MBS-K020	Human EGFRvIII-coupled Magnetic Beads
B7-H3	MBS-K040	Human B7-H3(4lg)-coupled Magnetic Beads
CD73	MBS-K022	Human CD73-coupled Magnetic Beads

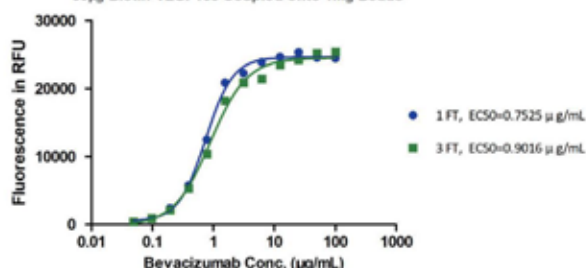
Featured Data

Biotin-CD3E Binding with Anti Human CD3 Ab by SA Beads
23µg Biotin-CD3E Coupled onto 1mg Beads



Freeze-thaw stability test. After different freeze-thaw cycles, binding activity between the Human CD3E-coupled Magnetic Beads (Cat.No. MBS-K026) and anti-CD3 antibody showed little deviation from the unfreeze-thaw sample (%RSD<10%). Three freeze-thaw cycles were performed.

Biotin-VEGF165 Binding with Bevacizumab by SA Beads
60µg Biotin-VEGF165 Coupled onto 1mg Beads



Freeze-thaw stability test. After different freeze-thaw cycles, binding activity between the Human VEGF165-coupled Magnetic Beads (Cat.No. MBS-K036) and Bevacizumab showed little deviation from the unfreeze-thaw sample (%RSD<10%). Three freeze-thaw cycles were performed.



Scan the QR code for more product information

ComboX: Streptavidin Series Products



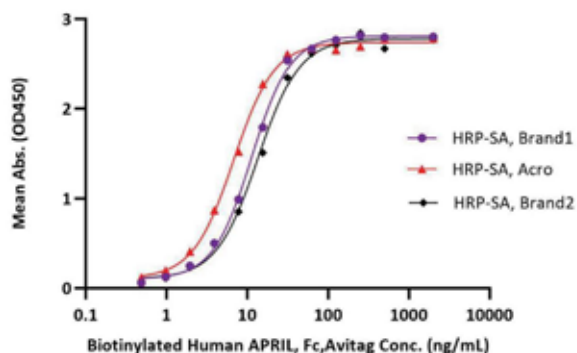
The Streptavidin series provide a robust and versatile platform for antibody selection and purification through the high-affinity interaction between biotinylated antibodies and streptavidin. Our diverse range of Streptavidin series products offers exceptional quality and performance, enabling efficient and reliable antibody screening. Explore our selection of Streptavidin series products to enhance your antibody discovery process and accelerate your research.

Product List

Molecule	Product Category	Cat. No.	Product Description
Streptavidin	SA	STN-N5116	Recombinant Streptavidin Protein
	Labeled SA	STN-NA113	Streptavidin Protein-APC
	Labeled SA	STN-NA114	Streptavidin Protein-Acrininium ester (MALS verified)
	Labeled SA	STN-NA115	Streptavidin Protein-Alexa Fluor™ 555 (HPLC verified)
	Labeled SA	STN-NA117	Streptavidin Protein-ALP, Alkaline Phosphatase conjugated Streptavidin
	Labeled SA	STN-NA118	Streptavidin Protein-Alexa Fluor™ 488 (MALS verified)
	Labeled SA	STN-NA119	Streptavidin Protein-Alexa Fluor™ 647 (HPLC verified)
	Labeled SA	STN-NC113	Streptavidin Protein-Cy5
	Labeled SA	STN-NC114	Streptavidin Protein-Cy3
	Labeled SA	STN-NF113	Streptavidin Protein-FITC
	Labeled SA	STN-NH913	Streptavidin Protein-HRP, Horseradish peroxidase conjugated Streptavidin
	Labeled SA	STN-NP117	Streptavidin Protein-PE, premium grade
	Labeled SA	STN-NP119	Streptavidin Protein-PE
	Labeled SA	STN-NT113	Streptavidin Protein-Texas Red
	SA Coated Plates	SP-11	Streptavidin Coated Plates, Clear, 12×8-Well Strips, White Frame
	SA Coated Plates	SP-13	Streptavidin Coated Plates, Clear, 12×8-Well Strips, White Frame (For Serological Testing)
	SA Coated Plates	SP-14	Streptavidin Coated Plates, Clear, 96-Well, Clear Frame
	SA Coated Plates	SP-15	Streptavidin Coated Plates, Clear, 96-Well, Clear Frame (For Serological Testing)
	SA Magnetic Beads	MPC-A006	Streptavidin-Magnetic Beads (recommended for MPCLIA)
	SA Magnetic Beads	SMB-B01	Magnetic Beads™ Streptavidin
	SA Magnetic Beads	MBS-C009	ActiveMax® Streptavidin μBeads, premium grade (for cells)

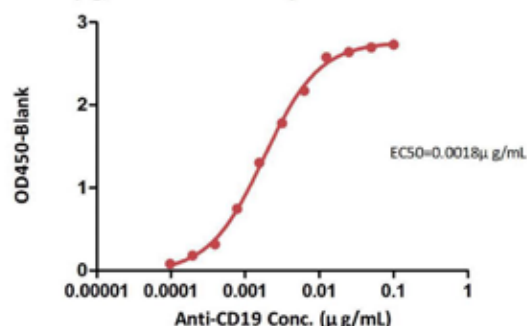
Featured Data

Streptavidin-HRP, Horseradish peroxidase conjugated Streptavidin ELISA



Measure performance comparison between Acro (Streptavidin Protein-HRP, Cat. No. **STN-NH913**, Horseradish peroxidase conjugated Streptavidin) and other competitive products. With tight quality control measures, Acro has better sensitivity than other brands.

5 $\mu\text{g/mL}$ SA Coated onto Plate per well
1 $\mu\text{g/mL}$ Biotin-CD19 captured to the SA-Plate



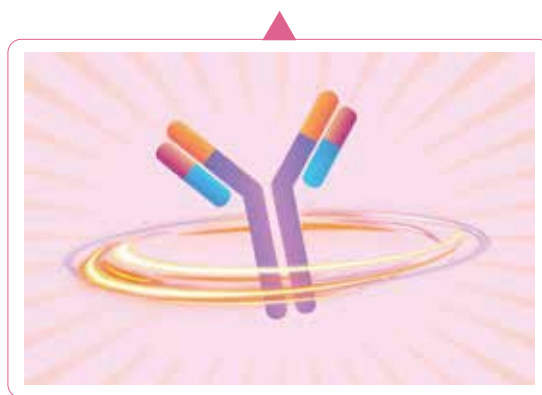
Immobilized Biotinylated Human CD19 (20-291), His, Avitag (Cat. No. **CD9-H82E9**) at 1 $\mu\text{g/mL}$ (100 μL /well) on Streptavidin Coated Plates, Clear, 96-Well (Cat. No. **SP-11**), can bind Anti-FMC63 antibody with a linear range of 0.1-3 ng/mL (QC tested).



Scan the QR code for more product information

ComboX: Universal Antibodies

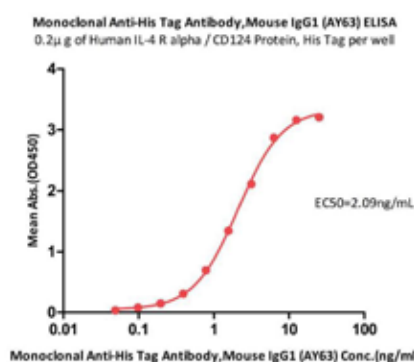
Universal antibodies hold immense significance in antibody screening. They possess broad reactivity and can recognize multiple targets across various species and applications. Our versatile range of universal antibodies offers high affinity and specificity, making them valuable tools for antibody screening and characterization. Explore our selection of universal antibodies to streamline your screening process and expedite antibody discovery and development.



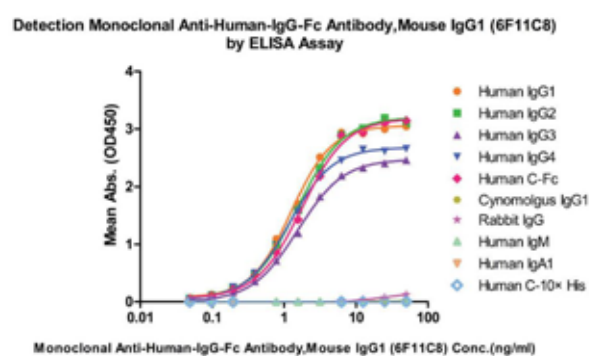
Product List

Product Category	Cat. No.	Species	Product Description
Anti-His Antibody	HIS-PLM535	Human	HRP conjugated Anti-His Antibody (AY63), mAb
	HIS-LY63	Mouse	HRP conjugated Anti-His Tag Antibody (AY63), mAb
	HIS-AY63	Mouse	Monoclonal Anti-His Tag Antibody, Mouse IgG1 (AY63)
	HIS-BVM539	Mouse	Biotinylated Anti-His Tag Antibody(AY63), Fab
	HIS-FM535	Mouse	Monoclonal Anti-His Tag Antibody, Human IgG1-Acrininium ester (55F8) (MALS verified)
Anti-Human IgG Antibody	IGG-AY69	Mouse	Monoclonal Anti-Human-IgG-Fc Antibody, Mouse IgG1 (6F11C8) (HPLC verified)
	AHG-Y69	Mouse	Anti-Human IgG Antibody-Acrininium ester (MALS verified)
	IGG-LY69	Mouse	HRP conjugated Anti-Human-IgG-Fc Antibody (6F11C8), mAb

Featured Data



Immobilized Human IL-4 R alpha Protein, His Tag (Cat. No. ILR-H5221) at 2 µg/mL (100 µL/well) can bind Monoclonal Anti-His Tag Antibody, Mouse IgG1 (AY63) (Cat. No. HIS-AY63) with a linear range of 0.20-3.13 ng/mL (QC tested).

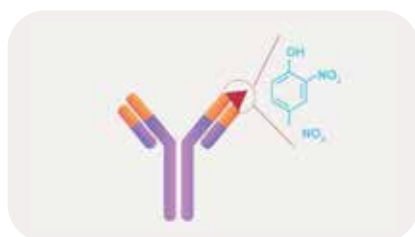


AM359b (Cat. No. SPD-M265, SPD-M400a, SPD-M401a, SPD-M402a) immobilized Anti-SARS-CoV-2 Spike RBD broadly neutralizing antibodies (Human IgG1, IgG2, IgG3, IgG4) and AC2-H5257 Human ACE2/ACEH Protein (Cat. No. AC2-H5257) bind 6F11C8 Monoclonal Anti-Human-IgG-Fc Antibody (Cat. No. IGG-AY69). Not binding: AM122 (Cat. No. SPD-M201), Omicron Antibody-3A7C12 (Cat. No. SPD-C73), AM122 (Cat. No. SPD-M162), AM130 (Cat. No. S1N-M164), and CD9-H52H2 Human CD19 Protein (Cat. No. CD9-H52H2). (HPLC verified, routinely tested).

ComboX: Isotype Controls

Isotype controls provide a baseline for comparison, helping to differentiate specific antibody binding from non-specific background signals. Our comprehensive range of isotype control products offers high quality and specificity, ensuring accurate antibody screening results. Explore our selection of isotype controls to optimize your antibody screening assays and enhance the reliability of your research findings.

★ IgG Isotype Controls



ACROBiosystems has developed a series of monoclonal antibodies with Human and Mouse species and different subtypes, which can be used as isotype control antibodies in various applications such as ELISA, western blot, immunofluorescence, immunohistochemistry (IHC) and flow cytometry (FACS), etc.

★ IgG Fc Proteins



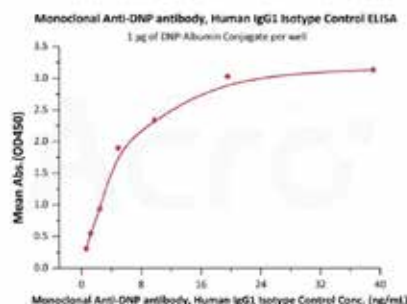
Our recombinant protein IgG Fc only contains the hinge region, CH2, CH3 sequence, but not the Fab sequence. It can be used as an ideal isotype control for monoclonal antibodies, IgG-like bispecific antibodies, ADC and IgG Fc- fusion drugs in the process of drug screening, functional verification and so on.

★ Recombinant Serum Albumin

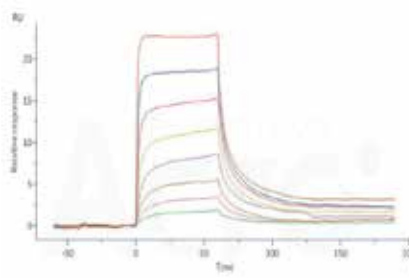


Fusion proteins for biopharmaceuticals have mostly focused on developing albumin-based constructs due to their high stability, easy construction, and stable formulation. Our recombinant Serum Albumin products that have been validated in binding to FcRn proteins and can be used as antibody drug targets and fusion protein drug isotype controls.

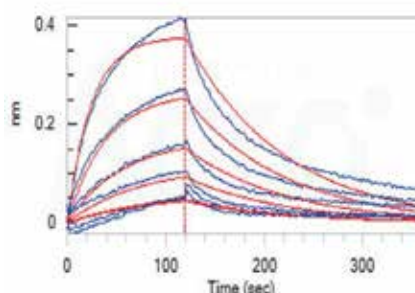
Featured Data



Immobilized DNP-Albumin Conjugate at 10 $\mu\text{g/mL}$ (100 $\mu\text{L/well}$) can bind Human IgG1 Kappa Isotype Control (mAb) (Cat. No. **DNP-M2**) with a linear range of 1-10 ng/mL (QC tested).



Human FCGR2&B2M Heterodimer Protein, His Tag (Cat. No. **FCN-H52W7**) captured on CM5 Chip via anti-His antibody can bind Human IgG4 Fc, Tag Free (Cat. No. **IG4-H5205**) with an affinity constant of 0.715 μM as determined in SPR assay (Biacore 8K) (QC tested).



Loaded Biotinylated Human Serum Albumin, His,Avitag (Cat. No. **HSA-H82E3**) on SA Biosensor, can bind Human FCGR2&B2M Heterodimer Protein, His Tag&Strep II Tag (Cat. No. **FCM-H5286**) with an affinity constant of 0.641 μM as determined in BLI assay (ForteBio Octet Red96e) (QC tested).

Scan the QR code for more product information



IgG Isotype Controls



IgG Fc Proteins

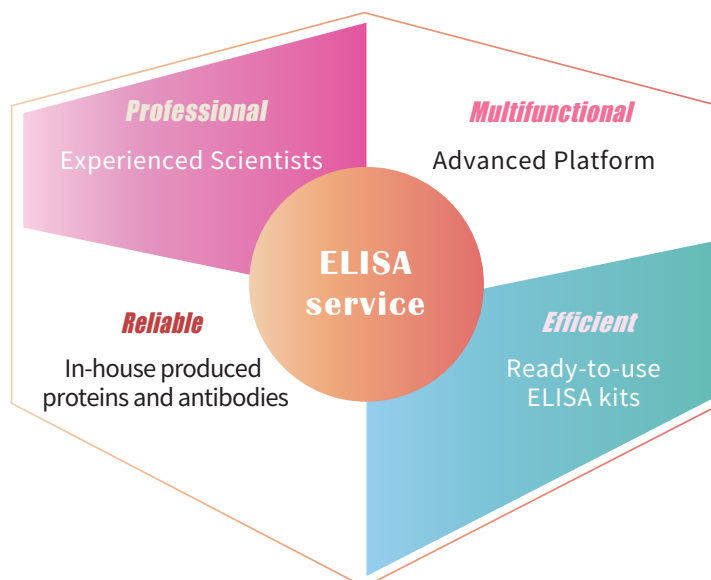


Recombinant Serum Albumin



ELISA has been a cornerstone in analyte detection for decades, providing crucial data for drug development research. Our ELISA detection service offers rapid and accurate assessment of candidate antibodies, evaluating their affinity, cross-reactivity, and specificity. With high-quality and reliable results, we enable the screening of top-quality antibodies, facilitating scientific understanding and further investigations.

ELISA Service

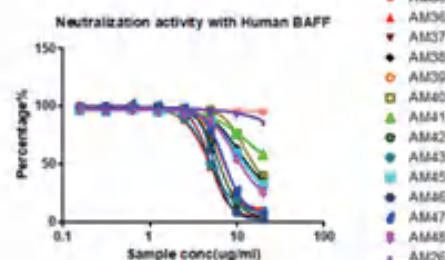


★ Platform



★ Case Sharing

Neutralized Activity of anti-BCMA mAb (ACRO) by ELISA Assay



Different anti-BCMA antibodies have different neutralization abilities for BCMA and BAFF.



Scan the QR code for more product information

SPR/BLI Affinity Sorting and Epitope Analysis Services

One-stop Service for Supporting your Drug Development
SPR/BLI Analytical Service
ACRO proteins supplied for free. Only your samples are required. Reports follow all IND requirements.
Acro
Our service is powered by Biacore 8K and ForteBio Octet.

An important parameter in determining intermolecular interactions is affinity. Determining the affinity is crucial for understanding molecules and identifying biological processes, drug discovery, screening, etc. We can perform preliminary affinity sorting of drug candidates in culture medium or purified drug candidates, as well as preliminary screening of their specificity and dynamics characteristics.

Platforms

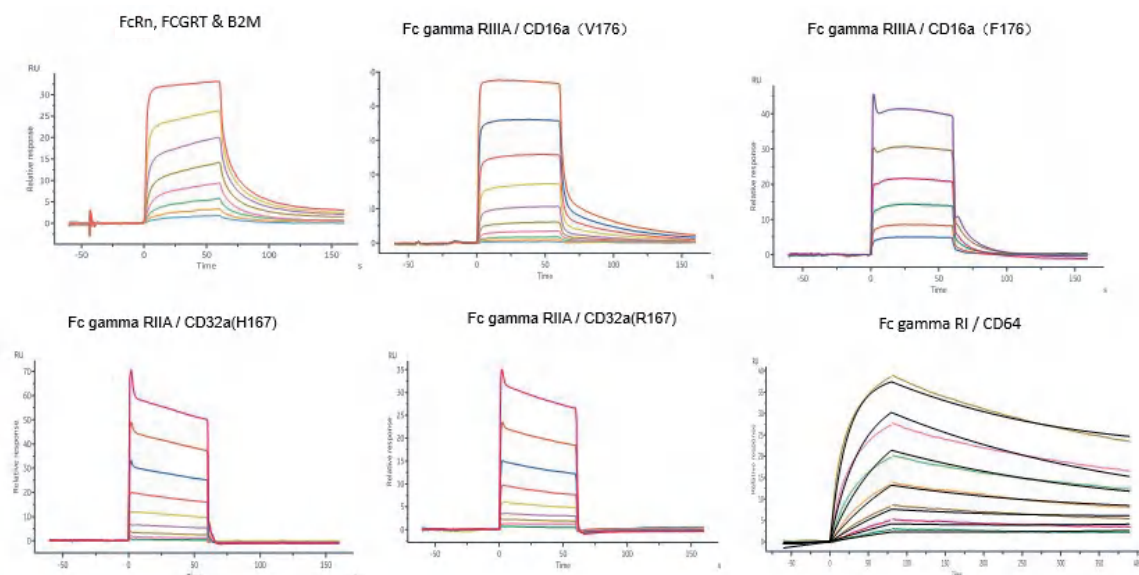
★ Surface Plasmon Resonance (SPR) service



★ Biolayer Interferometry (BLI) service



Case Sharing



Ligand	Analyte	KD (M)
FcRn (FCGRT & B2M) (Cat. No. FCN-H52W7)	BsAb-IgG	1.07E-06
Fc gamma RI/IIIA / CD16a (V176) (Cat. No. CD8-H52H4)		1.54E-06
Fc gamma RI/IIIA / CD16a (F176) (Cat. No. CDA-H5220)		5.23E-06
Fc gamma RI/IIIA / CD32a (R176) (Cat. No. CDA-H5221)		4.50E-06
Fc gamma RI/IIIA / CD32a (H167) (Cat. No. CD1-H5223)		2.43E-06
Fc gamma RI / CD64 (Cat. No. FCA-H52H1)		5.50E-09

Bispecific antibody (BsAb-IgG) binding with Fc gamma Receptor



Scan the QR code for more product information

Cross-Species Validation

Species-specific antibodies are commonly used in preclinical animal experiments to verify and evaluate its corresponding antibody candidate. Cross-species validation is an important step in the process of antibody drug development. Common species cross-validation methods include ELISA, SPR, BLI, and flow cytometry.

Multiple Species Target Proteins

Multiple species target proteins are crucial for cross-species experiments. They enable the study of protein interactions and functional analysis across different species. We offer diverse range of multiple species target proteins with high quality and specificity, facilitating successful cross-species experiments. Explore our selection of multiple species target proteins to unlock new insights and advance your research.

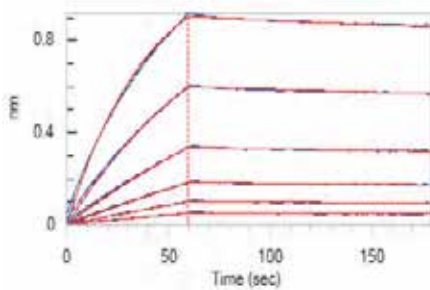
Featured Product

FLAG Transmembrane Proteins

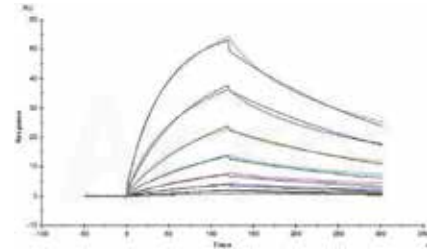
Cytokine Target Proteins

CD3 Proteins

Featured Data



Loaded Human IL-2 Protein, Fc Tag (Cat. No. **IL2-H5269**) on Protein A Biosensor, can bind Cynomolgus IL-2RB&IL-2RA&IL-2RG Protein, His Tag&Twin-Strep Tag (Cat. No. **ILG-C52W3**) with an affinity constant of 0.907 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Bispecific T-cell Engager (CD3XBCMA) immobilized on CM5 Chip can bind Biotinylated Cynomolgus CD3E&CD3D Heterodimer Protein, His,Avitag&Tag Free (Cat. No. **CDD-C82W6**) with an affinity constant of 53.5 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

>>More Related Information: (P03)

Multiple Species Fc Receptor Proteins

Multiple species Fc receptor proteins hold great significance in cross-species experiments. They can bind to the Fc region of immunoglobulins from different species, enabling cross-reactivity between species. We offer a range of multiple species Fc receptor proteins with high affinity and specificity, suitable for a wide range of cross-species experiments. Explore our multiple species Fc receptor proteins today and accelerate your research progress!



Human



Mouse



Cynomolgus / Rhesus macaque



Rat



Porcine



Rabbit



Feline



Bovine



Canine

Featured Product

FcRn

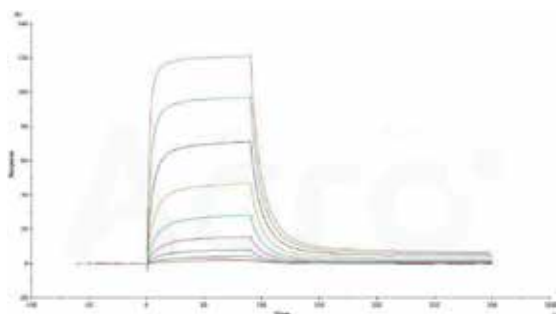
FcγRI/CD64

FcγRII/CD32

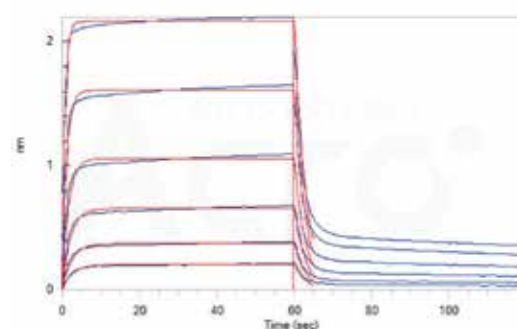
FcγRIII/CD16

FcεR

Featured Data



Biotinylated Mouse CD64, His,Avitag (Cat. No. [CD4-M82E7](#)) captured on Biotin CAP - Series S sensor Chip can bind Herceptin with an affinity constant of 59.8 nM as determined in a SPR assay (Biacore T200) (QC tested).



Loaded Biotinylated Cynomolgus CD32a, His,Avitag (Cat. No. [CDA-C82E5](#)) on SA Biosensor, can bind MabThera® (Rituximab) with an affinity constant of 2 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested) determined in a SPR assay (Biacore T200) (QC tested).

>>More Related Information: ([P08](#))

Biotinylated Target Proteins

Biotinylated target proteins play a significant role in cross-species experiments. They allow for specific and efficient detection and capture of the target protein using streptavidin-based assays. We offer a diverse range of biotinylated target proteins with high quality and specificity, enabling successful cross-species experiments. Explore our selection of biotinylated target proteins to enhance your research and streamline your assays.

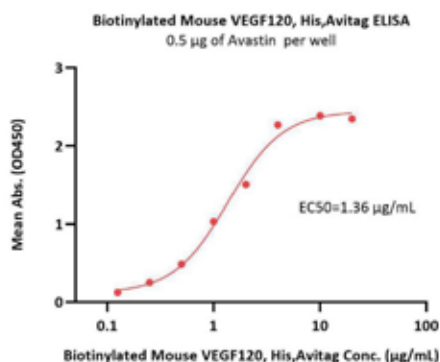
Featured Product

Biotinylated VEGF120 Proteins

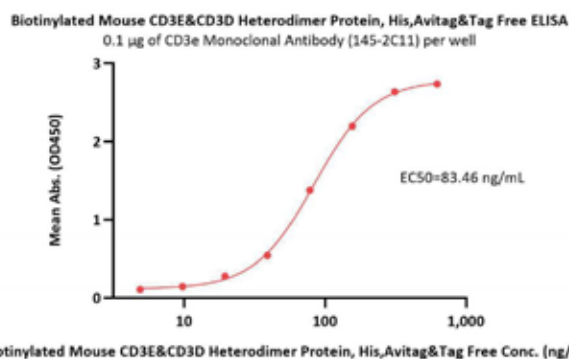
Biotinylated CD20 Proteins

Biotinylated CD3 Proteins

Featured Data



Immobilized Avastin at 5 μ g/mL (100 μ L/well) can bind Biotinylated Mouse VEGF120, His,Avitag (Cat. No. [VE0-M82Q2](#)) with a linear range of 0.125-2 μ g/mL (Routinely tested).



Immobilized CD3e Monoclonal Antibody (145-2C11) at 1 μ g/mL (100 μ L/well) can bind Biotinylated Mouse CD3E&CD3D Heterodimer Protein, His,Avitag&Tag Free (Cat. No. [CDD-M82W5](#)) with a linear range of 5-156 ng/mL (QC tested).

>>More Related Information: ([P07](#))

SPR/BLI Analysis Services

During the cross-species validation phase, antibodies from multiple species, such as mouse, and rabbit, are often selected to test their ability to bind to the target antigen. The affinity assay allows the binding strength and specificity of the antibody to the antigen to be evaluated to determine the most suitable antibody species for a particular experimental purpose.

Platforms

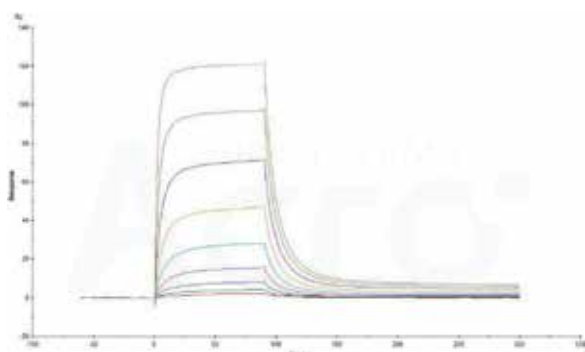
★ Surface Plasmon Resonance (SPR) service



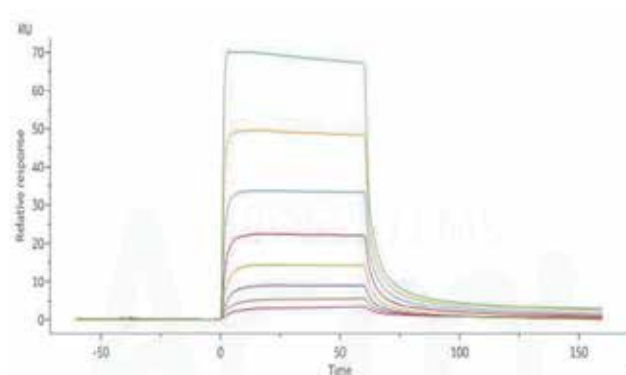
★ Biolayer Interferometry (BLI) service



Case Sharing



Biotinylated Mouse CD64, His,Avitag (Cat. No. **CD4-M82E7**) captured on Biotin CAP - Series S sensor Chip can bind Herceptin with an affinity constant of 59.8 nM as determined in a SPR assay (Biacore T200) (QC tested).



Rabbit FcγR2B2M Heterodimer Protein, His Tag&Tag Free (Cat. No. **FCM-R52W5**) captured on CM5 Chip via anti-His antibody can bind Herceptin® with an affinity constant of 2.28 μM as determined in SPR assay (Biacore 8K) (QC tested).

>>More Related Information: (P18)

■ Function Verification

In vitro biological function verification can accurately evaluate the effect function of antibody drugs. It is an important series of methods for antibody screening in the early stage of antibody research and development, further verification of antibody function in preclinical stage and comparison of titer between biosimilar drugs and original drugs.

Target Proteins

Target proteins enable the assessment of antibody binding, specificity, and functional activity. Our extensive range of target protein products offers high-quality and reliable tools for antibody functional evaluation. Explore our selection of target proteins to enhance your understanding of antibody functionality and accelerate your research in various fields.

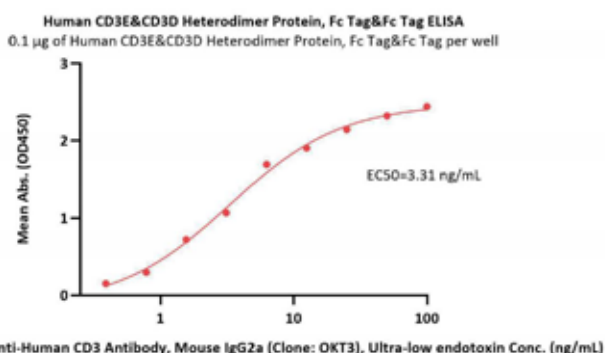
Featured Product

FLAG Transmembrane Proteins

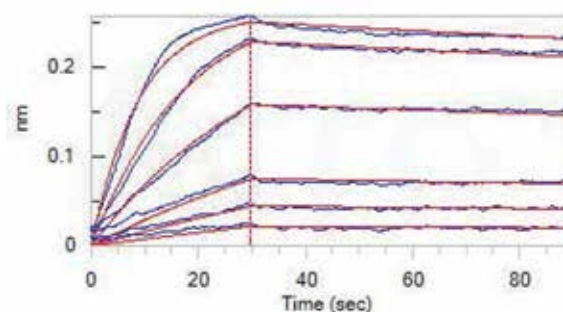
Cytokine Target Proteins

CD3 Proteins

Featured Data



Immobilized Human CD3E&CD3D Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. [CDD-H5255](#)) at 1 µg/mL (100 µL/well) can bind UCHT1 with a linear range of 0.8-6 ng/mL (Routinely tested).



Loaded Rat IL-2RB&IL-2RA&IL-2RG, His Tag&Twin-Strep Tag (Cat. No. [ILG-R5223](#)) on NTA Biosensor, can bind Human IL-2, Tag Free with an affinity constant of 1.16 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

>>More Related Information: (P03)

Biotinylated Target Proteins

The significance of biotin-labeled protein for antibody functional assessment lies in its ability to provide a highly sensitive and specific detection method, which can be used to study protein interactions, localization, and expression levels. Our biotin-labeled protein offers exceptional quality and stability for diverse biomedical research and diagnostics. It provides reliable experimental tools to scientists and clinicians.

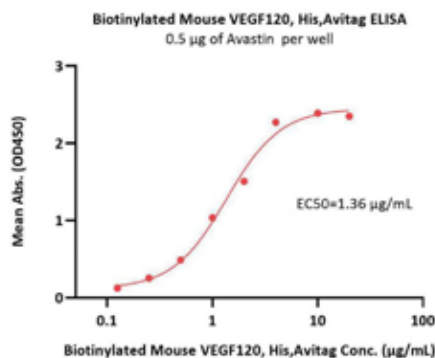
Featured Product

Biotinylated VEGF120 Proteins

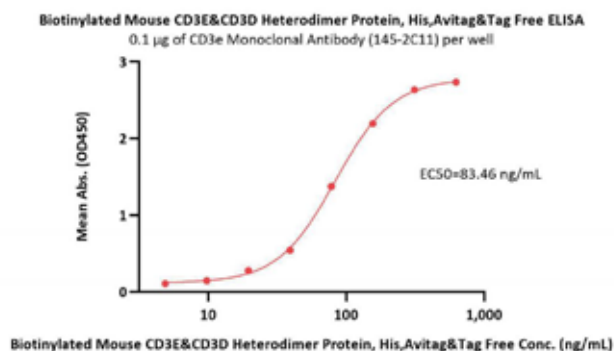
Biotinylated CD20 Proteins

Biotinylated CD3 Proteins

Featured Data



Immobilized Avastin at 5 µg/mL (100 µL/well) can bind Biotinylated Mouse VEGF120, His,Avitag (Cat. No. [VE0-M82Q2](#)) with a linear range of 0.125-2 µg/mL (Routinely tested).



Immobilized CD3e Monoclonal Antibody (145-2C11) at 1 µg/mL (100 µL/well) can bind Biotinylated Mouse CD3E&CD3D Heterodimer Protein, His,Avitag&Tag Free (Cat. No. [CDD-M82W5](#)) with a linear range of 5-156 ng/mL (QC tested).

>>More Related Information: (P07)

Inhibitor Screening Kits

Inhibitor screening assay kits are crucial for antibody functional evaluation. They allow for the identification and characterization of inhibitors that modulate antibody activity, providing insights into therapeutic potential and mechanism of action. Our comprehensive inhibitor screening assay kits offer high sensitivity and specificity, enabling efficient and accurate evaluation of antibody functionality.

Featured Product

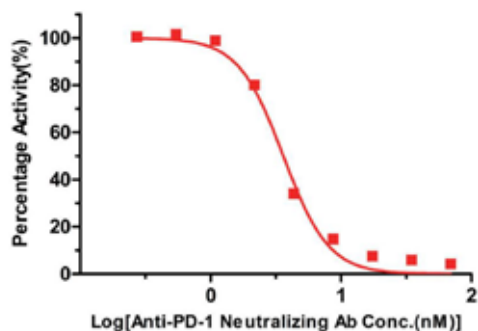
PD-L1 : PD-1 [Biotinylated] Inhibitor Screening ELISA Kit

PD-1 : PD-L1 [Biotinylated] Inhibitor Screening ELISA Kit

TSLP[Biotinylated]:IL-7Rα & TSLP R Inhibitor Screening ELISA Kit

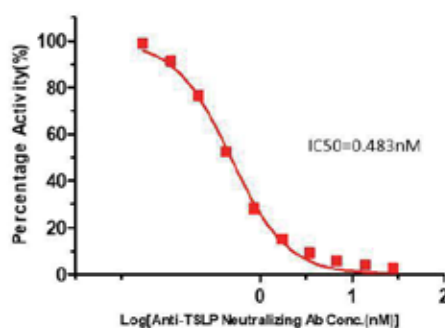
Featured Data

★ Cat. No. EP-101



Anti-PD-1 neutralizing antibody was diluted from 10 µg/mL to 0.078 µg/mL (69.628 nM to 0.544 nM) and loaded onto the plate coated by human PD-L1 in the presence of human PD-1-Biotin. The assay was performed according to the protocol in PD-1[Biotinylated]:PD-L1 Inhibitor Screening ELISA Assay Pair. The background was subtracted from data points prior to log transformation and curve fitting (QC tested).

★ Cat. No. EP-129



Serial dilutions of Anti-TSLP Neutralizing antibody (Catalog # EP129-C03) (1:1 serial dilution, from 8 µg/mL to 0.0156 µg/mL (55.317-0.108 nM)) was added into IL-7 R alpha & TSLP R: TSLP-Biotin binding reactions. The assay was performed according to the above-described protocol. The background was subtracted from data points prior to log transformation and curve fitting (QC tested).

>>More Related Information: (P10)

Overexpression Cell Lines

Overexpression stable cell lines are genetically modified stable cell lines designed to continuously overexpress a specific gene. A specific gene is designed to increase the expression level and subsequently introduced into cells using methods such as lentiviruses and electroporation to achieve 'Gain-of-Function'. The resulting cell then expresses the target antigen on the cell membrane surface, a function which is retained across multiple cell passages.

Featured Product

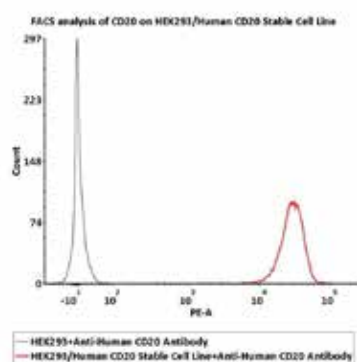
HEK293/Human TL1A Stable Cell Line

HEK293/Human Integrin alpha V beta 6 Stable Cell Line

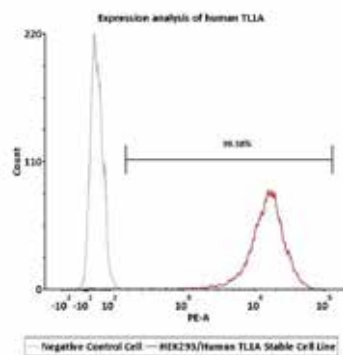
HEK293/Human CD20 Stable Cell Line

HEK293/Human Transferrin R Stable Cell Line

Featured Data



FACS assay shows that Monoclonal Anti-Human CD20 Full Length Antibody, Human IgG1 can bind to HEK293/Human CD20 Stable Cell Line. HEK293/Human CD20 Stable Cell Line was red line, Negative control HEK293 cells was grey line (QC tested).



Expression analysis of human TL1A on HEK293/Human TL1A Stable Cell Line by FACS. Cell surface staining was performed on HEK293/Human TL1A Stable Cell Line or negative control cell using anti-human TL1A Antibody followed by staining with PE anti-human IgG Fc Antibody.

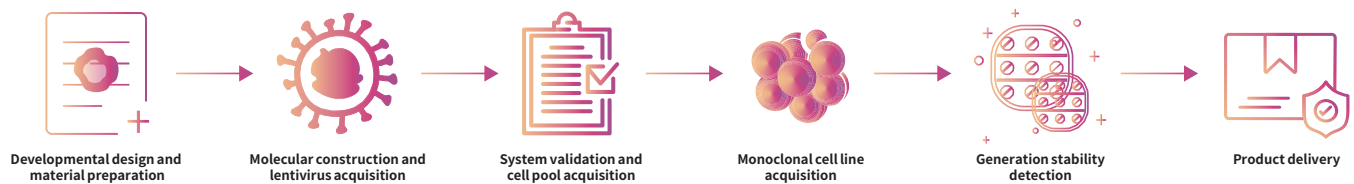
>>More Related Information: (P04)

Cell Line Customize Service

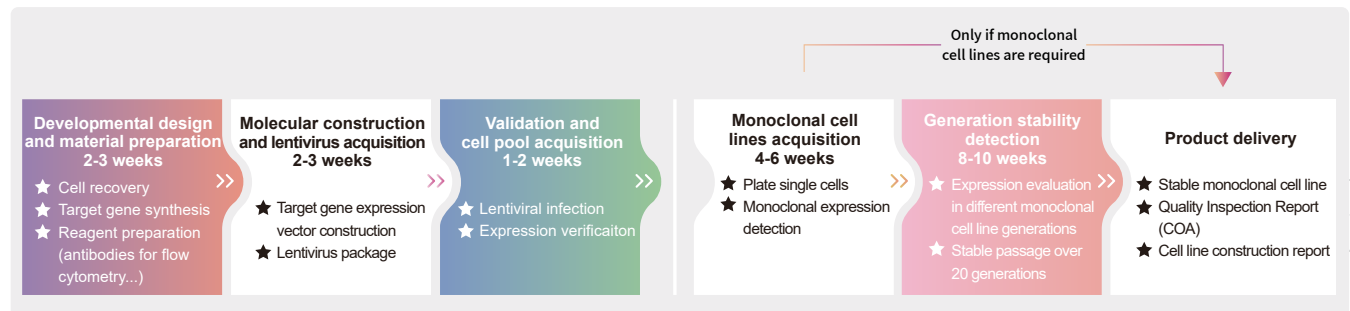


The key factor of the developmental process of new therapeutics in the activity determination of antibody therapeutic drugs. Transgenic cell lines are widely used due to their simplicity, speed, accuracy, non-biological safety, and animal substitution. Activity determination could be performed in various ways, however, *in vitro* evaluation is a critical part in drug development and quality control. ACROBiosystems offers customization services for overexpression cell lines to help you develop that perfect cell line.

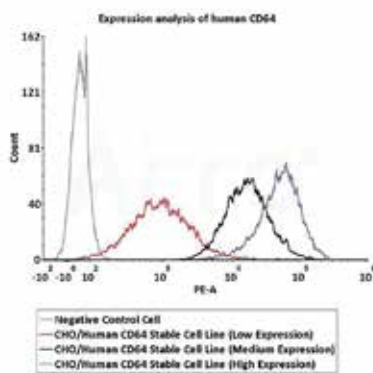
Service Workflow



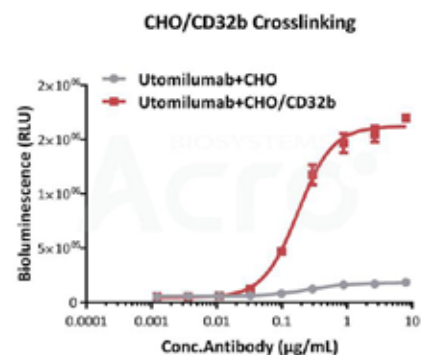
Service Content



Case Sharing



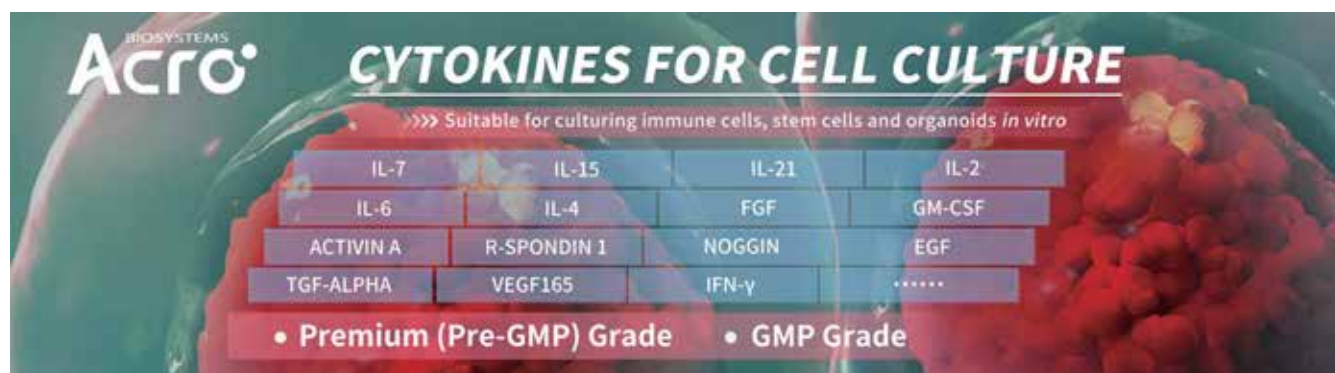
Expression analysis of human CD64 on CHO/Human CD64 Stable Cell Line by FACS. Cell surface staining using PE-labeled anti-human CD64 antibody was performed on CHO/Human CD64 Stable Cell Line with different expression levels: CHO/Human CD64 Stable Cell Line (Low Expression) (Cat. No. **SCCHO-ATP062L**); CHO/Human CD64 Stable Cell Line (Medium Expression) (Cat. No. **SCCHO-ATP062M**); CHO/Human CD64 Stable Cell Line (High Expression) (Cat. No. **SCCHO-ATP062H**).



Bioactivity analysis of anti-human 4-1BB antibody through CHO/Human CD32b Stable Cell Line (Medium Expression) (Cat. No. **SCCHO-ATP060M**) crosslinking to test whether in a CD32b-dependent manner to strengthen the agonistic activity. The EC₅₀ of anti-human 4-1BB antibody is approximately 0.18 µg/mL through CHO/Human CD32b Stable Cell Line (Medium Expression) crosslinking.



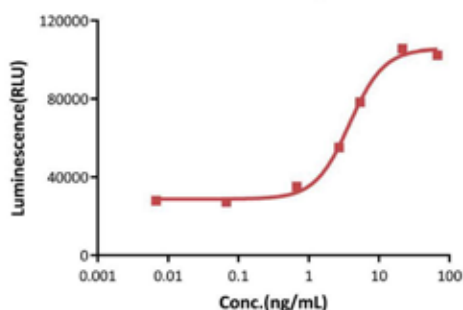
Scan the QR code for more product information



Cytokines for cell culture provide essential growth factors and signaling molecules that mimic the *in vivo* environment, enabling accurate assessment of antibody activity, potency, and efficacy. Our Premium-grade cytokines for cell culture offer superior quality and consistency, ensuring optimal cell growth and reliable functional evaluations. Experience the difference with our Premium-grade cytokines and enhance your antibody research today.

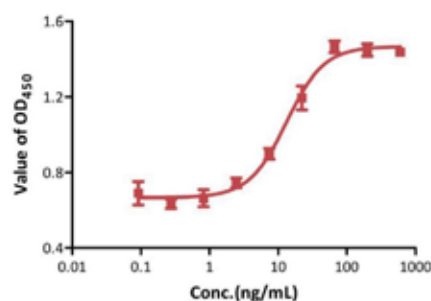
Case Sharing

GMP Human IL-7 Protein stimulates proliferation of PBMC cells



GMP Human IL-7 Protein (Cat. No. **GMP-L07H24**) stimulates proliferation of PHA-P-activated human peripheral blood mononuclear cell (PBMC). The specific activity of GMP Human IL-7 is $> 1.0 \times 10^8$ IU/mg, which is calibrated against human IL-7 WHO International Standard (NIBSC code: 90/530) (QC tested).

GMP Human IL-21 Protein stimulates secretion of IFN-γ by NK92



GMP Human IL-21 Protein (Cat. No. **GMP-L21H25**) stimulates secretion of IFN-γ by NK-92 human natural killer lymphoma cells stimulated with 10 ng/mL GMP Human IL-15 Protein (Cat. No. **GMP-L15H13**). The specific activity of GMP Human IL-21 Protein (Cat. No. **GMP-L21H25**) is $> 1 \times 10^5$ U/mg (QC tested).



Scan the QR code for more product information



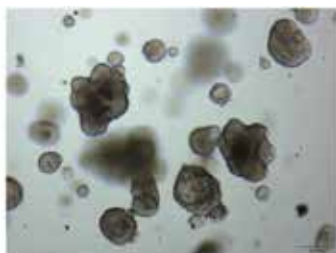
Basement membranes form continuous sheets of a specialized extracellular matrix that are an essential part in the organization of tissues forming the scaffolding and support for cellular growth and cell layers. They also affect a variety of cellular mechanisms such as adhesion, migration, proliferation, and differentiation.

Product List

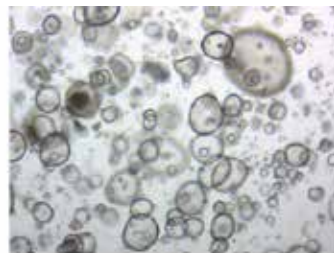
Cat. No.	Product Type	Product Description	Size
AC-M082704	Standard	Mogengel Matrix (Acro Certified)	10mL/5mL
AC-M082706		Mogengel Matrix (Phenol Red Free) (Acro Certified)	10mL/5mL
AC-M082701	Low-factor	Mogengel Matrix (GFR) (Acro Certified)	10mL/5mL
AC-M082703		Mogengel Matrix (GFR Phenol Red Free) (Acro Certified)	10mL/5mL
AC-M082724	High Concentration	Mogengel Matrix (HC) (Acro Certified)	10mL/5mL
AC-M082726		Mogengel Matrix (HC Phenol Red Free) (Acro Certified)	10mL/5mL
AC-M082721		Mogengel Matrix (HC GFR) (Acro Certified)	10mL/5mL
AC-M082723		Mogengel Matrix (HC GFR Phenol Red Free) (Acro Certified)	10mL/5mL
AC-M082777	Stem Cell	Mogengel Matrix IPSC Level (Acro Certified)	10mL/5mL
AC-M082755	Organoid	Mogengel Matrix Organoid Culture (Acro Certified)	10mL/5mL

Featured Data

★ Organoid Culturing



Colorectal Cancer Organoid (Day4)



Gastric Cancer Organoid (Day5)

Human tumor organoids (colorectal cancer organoids, gastric cancer organoids) can grow well in greater than 70% Mogengel (Cat. No. AC-M082755).



Scan the QR code for more product information

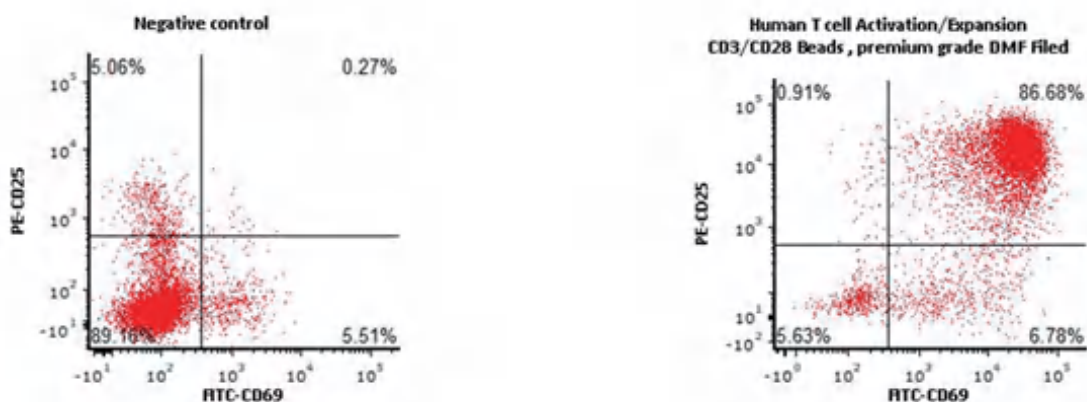
T cell Activation/Expansion Reagents

T cell activation/expansion reagents are essential for antibody functional evaluation. They facilitate T-cell activation and co-stimulation, mimicking the immune response *in vitro*. Our high-quality T cell activation/expansion reagents ensure reliable and efficient evaluation of antibody functionality. Discover the power of these tools in antibody research and accelerate your discoveries with our T cell activation/expansion reagents.

Featured Product

Cell Activation	Cell Culture	Residue analysis
OKT3 Antibody CD3/CD28 Activation Beads ...	Ultralow Endotoxin Cytokines Premium and GMP-grades ...	Cytokine ELISA Kit Anti-CD3/CD28 Antibody Kit ...

Featured Data



The purified human T cells were activated using ActiveMax® Human T cell Activation/Expansion CD3/CD28 Beads, premium grade DMF Filed (Cat. No. **MBS-C001**) at a ratio of 1:1 beads-to-cells for 24 hours with RPMI1640 supplemented with 10% of FBS. The negative control experiment was performed by adding the Negative Control Beads coupled HSA. Cells were fluorescently stained using PE labeled anti-human CD25 antibody and labeled FITC anti-human CD69 antibody and analyzed by flow cytometry.

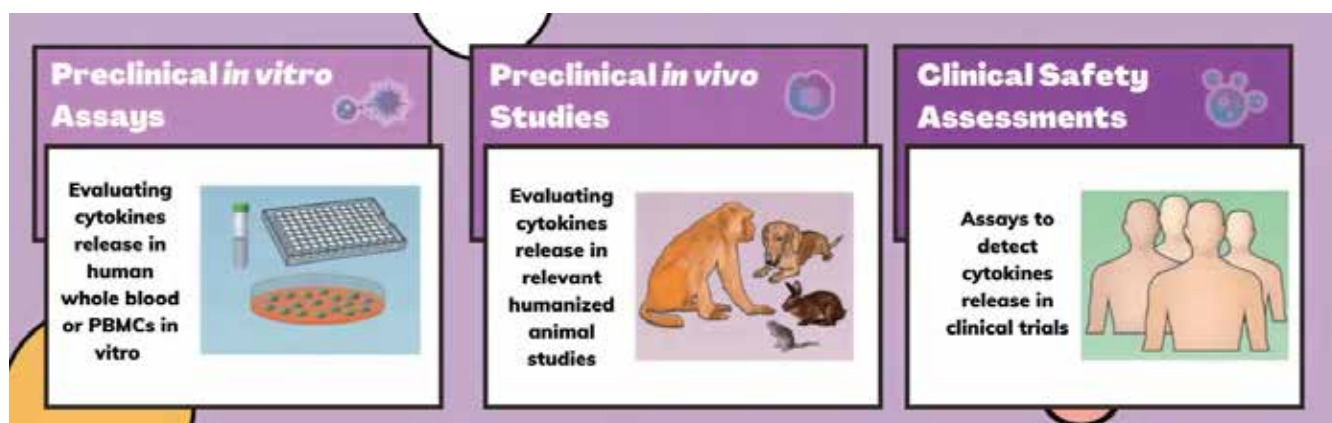
Cytokine Detection ELISA Kits

Cytokine detection ELISA Kits are invaluable for antibody functional evaluation. They enable the measurement of cytokine levels, providing insights into immune responses and antibody-mediated activities. Our high-quality cytokine ELISA assay kits offer sensitive and reliable quantification, facilitating accurate antibody functional assessments.

Product Features

- ✓ **Quick & Easy-to-use:** 2 hours assay with only 7 steps required.
- ✓ **Consistent:** Calibrated using NIBSC/WHO standards to ensure batch-to-batch consistency.
- ✓ **Strict Quality Control:** High sensitivity, specificity, accuracy, linearity and inter/intra precision.
- ✓ **Validated Method:** Comprehensive validation with available protocol and 24h professional technical support.
- ✓ **Minimal Matrix Interference:** Low matrix interference verified in cell culture supernatant and serum.

Application



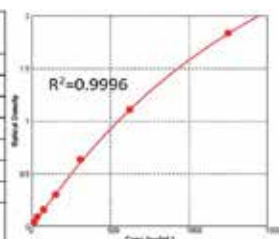
Product List

Cat. No.	Product Description
CEA-B036	Human MCP-1 / CCL2 ELISA Kit
CEA-B039	Human Soluble CD38 ELISA Kit
CRS-B016	Human C-Reactive Protein (CRP) ELISA Kit
CEA-B038	Human Soluble Delta Like Protein 4 (DLL4) ELISA Kit, PRO
CEA-C027	Human Erythropoietin (EPO) ELISA Kit, PRO

Cat. No.	Product Description
CEA-C077	Human GDF-15 ELISA Kit
CRS-B007	Human GM-CSF ELISA Kit
CEA-B033	Human Granzyme B ELISA Kit
CRS-B012	Human HGF ELISA Kit
CFA-C001	Human IFN- γ Kit (Flow Cytometry Beads Assay)
CRS-B013	Human IFN- γ Quick ELISA Kit
CRS-A017	Human Interferon- γ (IFN- γ) ELISA Kit
CEA-C006	Human IFN- γ ELISA Kit, PRO
CRS-B002	Human IL-1 β ELISA Kit
CRS-B005	Human IL-10 ELISA Kit
CRS-B009	Human IL-12p70 ELISA Kit
CRS-B008	Human IL-2 ELISA Kit
CRS-B003	Human IL-4 ELISA Kit
CRS-B001	Human IL-6 ELISA Kit
CRS-B004	Human IL-8 ELISA Kit
CEA-C004	Human IL-8 ELISA Kit, PRO
FCM-C21R	Human inflammation Kit (3-plex) (Flow Cytometry Multiplex Bead Assay, Non-Magbeads)
CEA-B030	Human Soluble Mesothelin ELISA Kit, PRO
CEA-B040	Human NKp46/NCR1 ELISA Kit, PRO
CEA-B050	Human Soluble ROR1 ELISA Kit, PRO
CEA-C029	Human TARC/CCL17 ELISA Kit
FCM-C10R	Mouse Th1 Cytokine Kit (4-plex) (Flow Cytometry Multiplex Bead Assay, Non-Magbeads)
FCM-C05R	Human Th1/Th2 Cytokine Kit (Flow Cytometry Multiplex Bead Assay)
CRS-A002	Human Tumor Necrosis Factor Alpha (TNF- α) ELISA Kit
CEA-B032	Human Soluble TROP2 ELISA Kit, PRO

Featured Data

IFN- γ Calibrator (pg/mL)	OD _{450nm} values
1250	1.888
625	1.156
312.5	0.686
156.25	0.352
78.125	0.207
39.0625	0.142
19.53125	0.086
Blank	0.052



The sensitivity of Human Interferon- γ (IFN- γ) ELISA Kit (Cat. No. **CRS-A017**) is 5.309 pg/mL.

	Intra-Assay Precision			Inter-Assay Precision		
Sample	1	2	3	1	2	3
n	20	20	20	3	3	3
Mean (pg/mL)	965.500	490.722	245.491	969.037	500.442	251.686
Standard Deviation	62.466	16.545	3.843	16.377	8.873	13.419
CV %	6.5	3.4	1.6	1.7	1.8	5.3

Human Interferon- γ (IFN- γ) ELISA Kit (Cat. No. **CRS-A017**) was verified to have an intra/inter-precision of less than 10%.



Scan the QR code for more product information

SPR/BLI Analysis Services

The role of affinity assays in the functional validation phase of an antibody drug is to assess the binding properties between the antibody and the target molecule, including binding strength, specificity and binding dynamics. This helps to identify antibody drugs with good binding properties and provides important guidance for further optimization and clinical studies.

Platforms

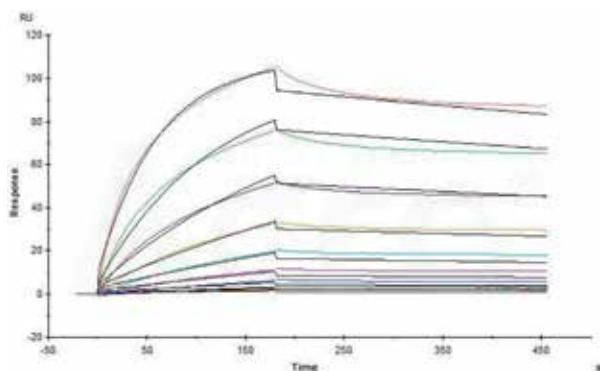
★ Surface Plasmon Resonance (SPR) service



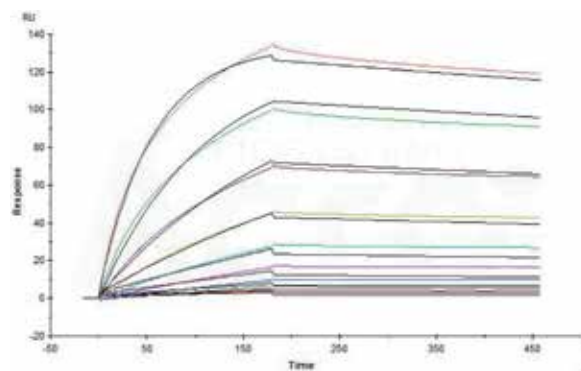
★ Biolayer Interferometry (BLI) service



Case Sharing



Rituximab captured on CM5 chip via anti-human IgG Fc antibody can bind Cynomolgus CD20 Full Length, His Tag (Cat. No. **CD0-C52H8**) with an affinity constant of 5.48 nM as determined in an SPR assay (in the presence of DDM and CHS) (Biacore T200) (Routinely tested).



Ofatumumab captured on CM5 chip via anti-human IgG Fc antibody can bind Cynomolgus CD20 Full Length, His Tag (Cat. No. **CD0-C52H8**) with an affinity constant of 3.51 nM as determined in an SPR assay (in the presence of DDM and CHS) (Biacore T200) (Routinely tested).

>>More Related Information: (P18)

■ Structural Analysis

The function of an antibody depends on the epitopes it binds to the antigen. Depending on the epitopes, antibodies perform specific functions, such as activating or inhibiting activity. A good antibody candidate requires high specificity and appropriate affinity for functional epitopes. Therefore, the structural analysis of antibody drugs at this stage is mainly site analysis, and commonly used methods include SPR, BLI and ELISA.

Target Proteins

Target proteins are essential for antibody structure analysis, providing valuable insights into antibody-antigen interactions and conformational changes. Our diverse range of target protein products offers high-purity and well-characterized proteins for accurate structural analysis of antibody complexes. Explore our selection of target proteins to advance your understanding of antibody structure and optimize antibody design and engineering.

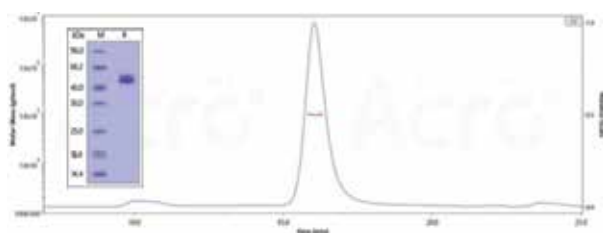
Featured Product

FLAG Transmembrane Proteins

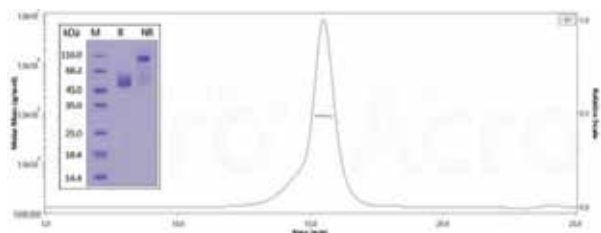
Cytokine Target Proteins

CD3 Proteins

Featured Data



Cynomolgus IL-4, Fc Tag (Cat. No. **IL4-C5259**) on SDS-PAGE under reducing (R) and non-reducing (NR) conditions and the purity of the protein is greater than 90%. The purity of the protein is more than 90% and around 85-115 kDa verified by SEC-MALS.



Human CD3E&CD3D Heterodimer Protein (Cat. No. **CDD-H52Wa**) on SDS-PAGE under reducing (R) and non-reducing (NR) condition and the purity of the protein is greater than 95%. The purity of the protein is more than 85% and around 80-90 kDa verified by SEC-MALS.

>>More Related Information: (P03)

SPR/BLI Analysis Services

An excellent antibody candidate needs to have high specificity and appropriate affinity for the epitope. Based on the label-free and high-throughput SPR/BLI molecular interaction assay service platform, it is possible to perform epitope binning among a large number of biological drug candidates.analysis.

Platforms

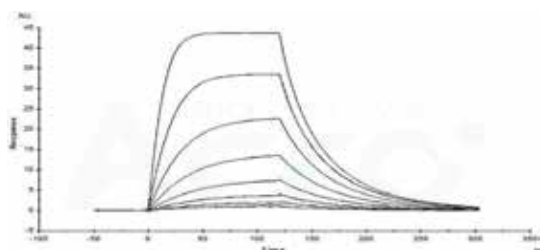
★ Surface Plasmon Resonance (SPR) service



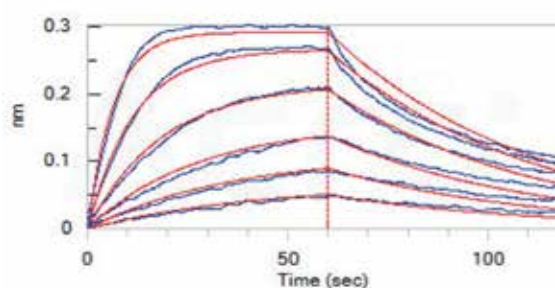
★ Biolayer Interferometry (BLI) service



Case Sharing



Anti-Human BCMA MAb (human IgG1) captured on CM5 chip via Anti-Human IgG Fc antibodies surface, can bind Human BCMA, His Tag (Cat. No. [BCA-H522y](#)) with an affinity constant of 13.0 nM as determined in an SPR assay (Biacore T200) (Routinely tested).



Loaded Anti-Human BCMA MAb (human IgG1) on Protein A Biosensor, can bind Human BCMA, His Tag (Cat. No. [BCA-H522y](#)) with an affinity constant of 29.1 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

>>More Related Information: ([P18](#))

Antibody Modification

Antibody modification includes humanization, Fc affinity modification and druggability modification. It focuses on the optimization of immunogenicity, affinity maturation and other issues, aims to find a balance between effectiveness and safety. ELISA, SPR/BLI and other methods were commonly used to verify the affinity changes, cell function changes and ADCC/ADCP/CDC cell function verification before and after the modification.

Target Proteins

Target proteins play a crucial role in antibody structure modification, allowing for precise engineering and optimization of antibody properties. Our comprehensive range of target protein products offers high-quality and well-characterized proteins for efficient structure modification studies. Explore our selection of target proteins to enhance your ability to modify antibody structures and tailor their properties for specific applications in therapeutics and diagnostics.

Featured Product

FLAG Transmembrane Proteins

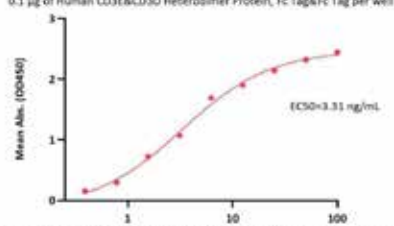
Cytokine Target Proteins

CD3 Proteins

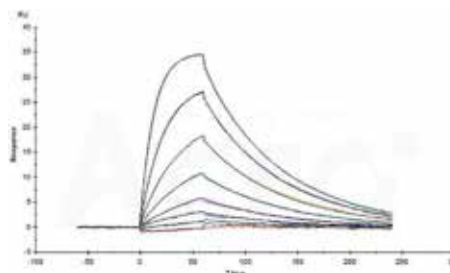
Case Sharing

Human CD3E&CD3D Heterodimer Protein, Fc Tag&Fc Tag ELISA

0.1 µg of Human CD3E&CD3D Heterodimer Protein, Fc Tag&Fc Tag per well



Immobilized Human CD3E&CD3D Heterodimer Protein, Fc Tag & Fc Tag (Cat. No. [CDD-H5255](#)) at 1 µg/mL (100 µL/well) can bind UCHT1 with a linear range of 0.8-6 ng/mL (Routinely tested).



Human IL-2 R beta, His Tag (SPR verified) (Cat. No. [CD2-H5221](#)) captured on CM5 chip via anti-His antibody, can bind Human IL-2, Tag Free (Cat. No. [IL2-H4113](#)) with an affinity constant of 0.525 µM as determined in a SPR assay (Biacore T200).

>>More Related Information: ([P03](#))

Fc Receptor Proteins

Fc receptor proteins enable fine-tuning of antibody properties and enhance their effector functions. Our extensive range of Fc receptor protein products offers high-quality and reliable tools for efficient structure modification studies. Explore our selection of Fc receptor proteins to advance your ability to engineer antibody structures and optimize their interactions with immune cells.

Featured Product

FcRn

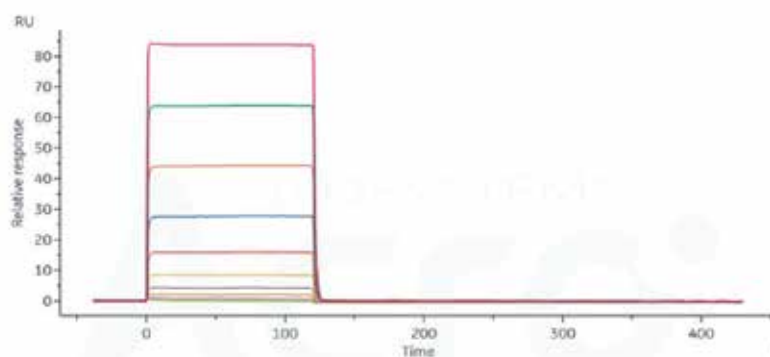
FcγRI/CD64

FcγRII/CD32

FcγRIII/CD16

FcεR

Featured Data



Immobilized Human Fc gamma RIIB / CD32b Protein (Cat. No. **CDB-H5228**) on CM5 Chip via anti-His antibody, can bind Ritux[®]mab with an affinity constant of 10 μ M as determined in a SPR assay (Biacore T200).

>>More Related Information: (P08)

SPR/BLI Analysis Services

In the antibody modification phase of an antibody drug, affinity assays serve to evaluate and optimize the binding properties between the modified antibody and the target molecule. It plays a key role in the process of antibody modification, helping to determine the affinity and specificity of the modified antibody, as well as adjusting the binding properties of the antibody.

Platforms

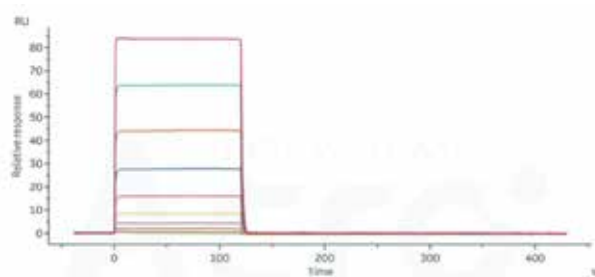
★ Surface Plasmon Resonance (SPR) service



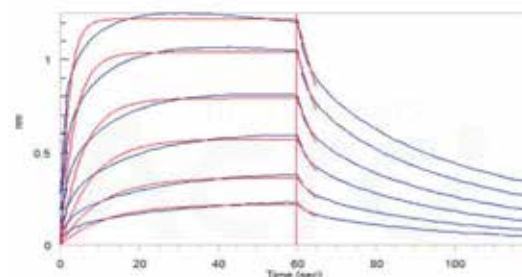
★ Biolayer Interferometry (BLI) service



Case Sharing



Immobilized human FcRn protein (Cat.No. **CDB-H5228**) to 120RU on CM5 Chip can bind Herceptin® with an affinity constant of 1.19 μ M as determined in SPR assay (Biacore T200).



Loaded Human CD64, His Tag (SPR & BLI verified) (Cat. No. **FCA-H52H2**) on HIS1K Biosensor, can bind Herceptin with an affinity constant of 13 nM as determined in BLI assay (ForteBio Octet Red96e).

>>More Related Information: (P18)

Antibody Evaluation

Properties of therapeutic antibody include physical, chemical, and biochemical characteristics, determined by the protein's sequence and structure, which can vary with specific targets. Developability is the inherent property of the molecule, primarily established during early sequence modifications, but influenced by subsequent manufacturing processes (e.g., aggregation, degradation) and clinical trials (metabolism, pharmacology, immunogenicity). Therefore, evaluating the developability of antibody drugs is crucial.

Target Proteins

Maximize antibody evaluation with our diverse range of target protein products. Unlock valuable insights into antibody functionality, specificity, and binding affinity. Trust our solutions to empower accurate and comprehensive antibody assessment, driving advancements in antibody research and development.

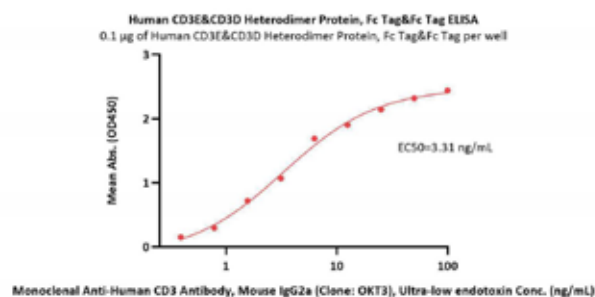
Featured Product

FLAG Transmembrane Proteins

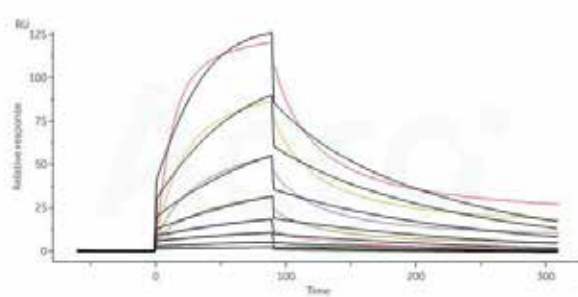
Cytokine Target Proteins

CD3 Proteins

Featured Data



Immobilized Human CD3E&CD3D Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. **CDD-H5255**) at 1 μ g/mL (100 μ L/well) can bind UCHT1 with a linear range of 0.8-6 ng/mL (Routinely tested).



Human IL-2 R beta, His Tag (SPR verified) (Cat. No. **CD2-H5221**) captured on CM5 chip via anti-His antibody, can bind Human IL-2, Tag Free (Cat. No. **IL2-H4113**) with an affinity constant of 0.525 μ M as determined in a SPR assay (Biacore T200).

>>More Related Information: (P03)

Biotinylated Target Proteins

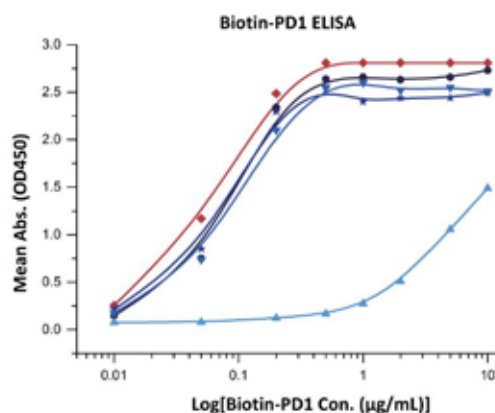
In order to make the evaluation of developability more accurate, we offer an exclusive collection of pre-labeled and experimentally validated biotinylated recombinant proteins for antibody evaluation. These products are made from high-quality human cell-expressed proteins, and every step of the process is fully considered to achieve the highest bioactivity and detection sensitivity.

Featured Product

An exclusive collection of ready-to-use Avitag™ biotinylated proteins

A unique series of chemically labeled biotinylated proteins with ultra sensitivity

Featured Data



Binding activity of different forms of biotinylated PD1 evaluated in a functional ELISA against rhPD-L1 (Cat. No. PD1-H5258).

>>More Related Information: (P07)

Inhibitor Screening Kits

Antibody drugs can produce therapeutic effects by blocking or neutralizing the interaction between proteins. We offer a range of inhibitor screening kits that save time in setting up methods, which helps to understand the mechanism of action of antibody drugs, potential toxicities and drug-drug interactions, and provides important information for antibody evaluation.

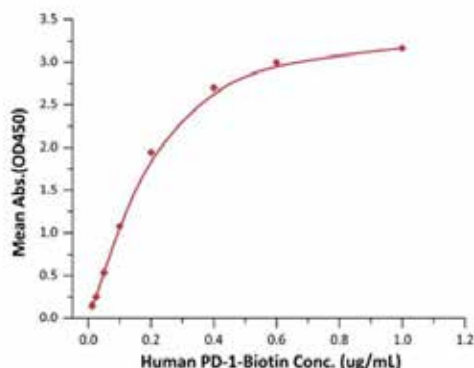
Featured Product

PD-1 [Biotinylated]: PD-L1 Inhibitor Screening ELISA Kit

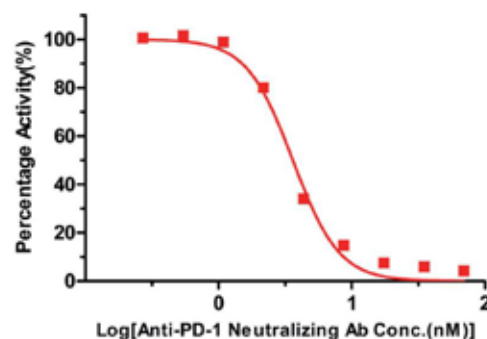
CD47 [Biotinylated]: SIRP alphaV2 Inhibitor Screening ELISA Kit

IL-12B: IL-12RB1 [Biotinylated] Inhibitor Screening ELISA Kit

★ Cat. No. EP-101



Immobilized human PD-L1 protein at 2 µg/mL (100 µL/well) can bind human PD-1-Biotin with a linear range of 0.01 - 0.2µg/mL when detected by Streptavidin-HRP. The background was subtracted from data points before curve fitting.



Serial dilutions of anti-PD-1 neutralizing antibody (1:1 serial dilutions, from 10 µg/mL to 0.078 µg/mL , 69.628 nM to 0.544 nM) was added into PD-L1 : PD-1-Biotin binding reactions. The assay was performed according to the above described protocol. The background was subtracted from data points prior to log transformation and curve fitting.

>>More Related Information: (P10)

Overexpression Cell Lines

Overexpression stable cell lines are a genetically modified stable cell line designed to continuously overexpress a specific gene. A specific gene is designed to increase the expression level and subsequently introduced into cells using methods such as lentiviruses and electroporation to achieve 'Gain-of-Function'. The resulting cell then expresses the target antigen on the cell membrane surface, a function which is retained across multiple cell passages.

Featured Product

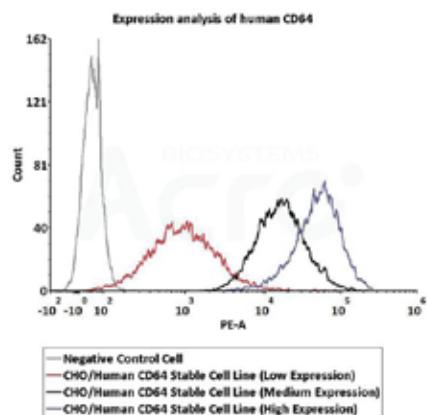
HEK293/Human TL1A Stable Cell Line

HEK293/Human Integrin alpha V beta 6 Stable Cell Line

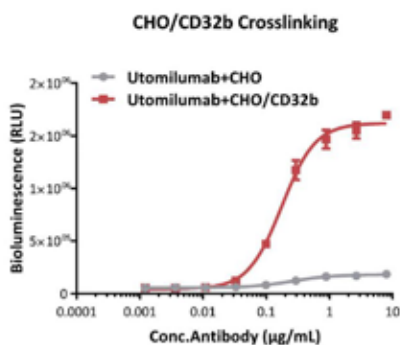
HEK293/Human CD20 Stable Cell Line

HEK293/Human Transferrin R Stable Cell Line

Featured Data



Expression analysis of human CD64 on CHO/Human CD64 Stable Cell Line by FACS. Cell surface staining using PE-labeled anti-human CD64 antibody was performed on CHO/Human CD64 Stable Cell Line with different expression levels: CHO/Human CD64 Stable Cell Line (Low Expression) (Cat. No. [SCCHO-ATP062L](#)); CHO/Human CD64 Stable Cell Line (Medium Expression) (Cat. No. [SCCHO-ATP062M](#)); CHO/Human CD64 Stable Cell Line (High Expression) (Cat. No. [SCCHO-ATP062H](#)).



Bioactivity analysis of anti-human 4-1BB antibody through CHO/Human CD32b Stable Cell Line (Medium Expression) (Cat. No. **SCCHO-ATP060M**) crosslinking to test whether in a CD32b-dependent manner to strengthen the agonistic activity. The EC50 of anti-human 4-1BB antibody is approximately 0.18 µg/mL through CHO/Human CD32b Stable Cell Line (Medium Expression) crosslinking.

>>More Related Information: (P04)

Cytokines for Cell Culture (Premium Grade)

Cytokines provide important information in the assessment of the developability of antibody drugs, including the effect of antibodies on the modulation of immune regulation, inflammatory responses and intercellular communication. Our premium grade proteins originate from the same clone, sequence, and expression system as our GMP products. This means developers utilizing our premium-grade products can be easily transition into GMP products for use in CMC or clinical stages without more comparability studies of the manufacturing process.

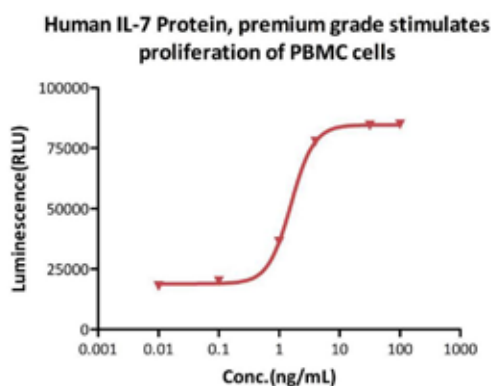
Featured Product

Human IL-7 Protein, premium grade

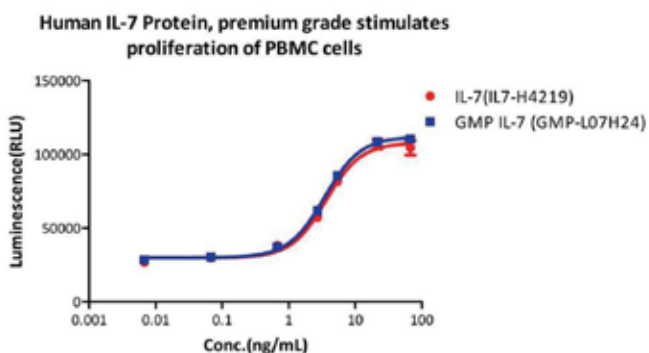
Biotinylated Human CD5 Protein, His, Avitag™, premium grade

Human DLL4 Protein, Fc Tag, premium grade, etc.

Featured Data



Human IL-7, premium grade (Cat. No. **IL7-H4219**) stimulates proliferation of PHA-P-activated human peripheral blood mononuclear cell (PBMC). The EC50 for this effect is 1.565 ng/mL, corresponding to a specific activity of $> 1.0 \times 10^8$ IU/mg, which is calibrated against human IL-7 WHO International Standard (NIBSC code: 90/530) (QC tested).



Human IL-7, premium grade (Cat. No. **IL7-H4219**), designed for preclinical stage, has the same activity and performance with GMP Human IL-7 (Cat. No. **GMP-L07H24**), which enables a seamless transition from preclinical development to clinical phases.

>>More Related Information: (P27)

T cell Activation/Expansion Reagents

T cell activation/expansion reagents assess the potency and mechanism of cytotoxic antibodies that trigger T cell-mediated cytotoxic responses. The cytotoxic capacity of antibodies is evaluated and their immunomodulatory effects are understood by measuring T cell activation markers, release of cytotoxic molecules and cell proliferation. This helps to select the most potent antibody candidates and optimize the process of antibody drug design and development.

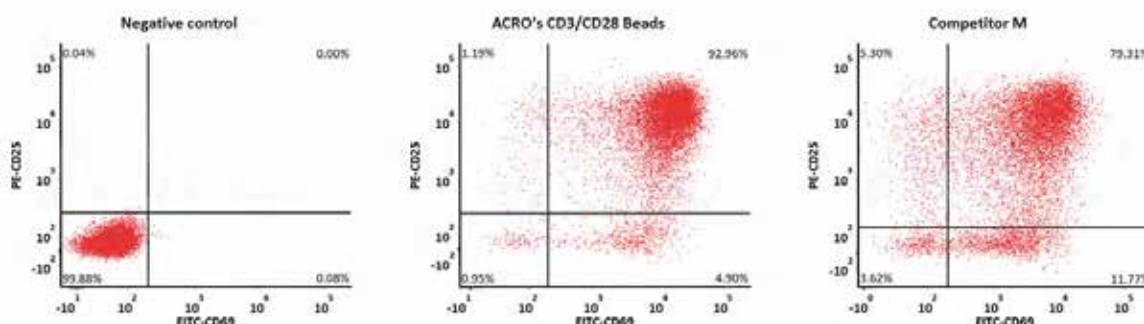
Featured Product

Cell Activation: OKT3 Antibody, CD3/CD28 Activation Beads

Cell Culture: Ultralow Endotoxin Cytokines, RUO, Premium and GMP-grades

Residue analysis: Cytokine ELISA Kit, Anti-CD3/CD28 Antibody Kit

Featured Data



Activation efficiency of human T cells was evaluated by flow cytometry using activation markers CD25 and CD69. Cells were evaluated 24 hours after stimulation and compared. (A) Negative control, (B) ACROBiosystems CD3/CD28 beads (Cat. No. **MBS-C001**) and (C) competitor products were compared. ACROBiosystems CD3/CD28 beads show superior activation rates compared to competitors' T cell activation beads.

>>More Related Information: (P30)

Cytokine Detection ELISA Kits

Cytokine assays can help assess the immunomodulatory effects, anti-inflammatory and immune-enhancing effects of antibody drugs and reveal their potential mechanisms in disease treatment. Our Cytokine detection ELISA kit can contribute to the success of your pharmacodynamic study by providing reliable and accurate quantification of cytokines.

Featured Product

Human Soluble Delta Like Protein 4 (DLL4) ELISA Kit

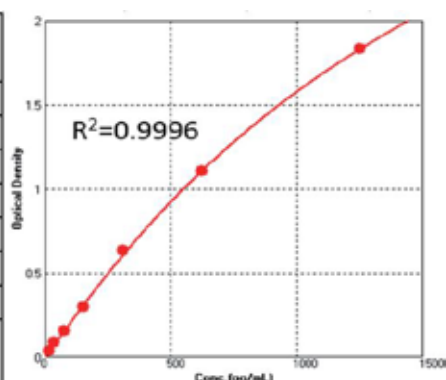
Human Erythropoietin (EPO) ELISA Kit

Human IFN- γ ELISA Kit

Human IL-8 ELISA Kit, etc.

Featured Data

IFN- γ Calibrator (pg/mL)	OD _{450nm-630nm}
1250	1.888
625	1.156
312.5	0.686
156.25	0.352
78.125	0.207
39.0625	0.142
19.53125	0.088
Blank	0.052



The sensitivity of Human Interferon- γ (IFN- γ) ELISA Kit (Cat. No. **CRS-A017**) is 5.309 pg/ML.

>>More Related Information: (P40)

Enzymes for Antibody Characterization

Endo H (500U/ μ l)

Endo S (200U/ μ l)

SpeB (40U/ μ l)

IdeS (20U/ μ l)

...

Enzymes for In-Depth Antibody Characterization

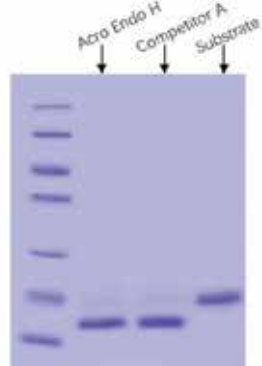
We provide tool enzymes for antibody analysis, aiding in antibody fragmentation, glycosylation analysis, and exploring the relationship between antibody structure and function. These tools contribute to the discovery and development of antibody drugs.

Product List

Product Details	Cat. No.	Unit Definition
Endo H (500U/ μ l)	ENH-S5116	One unit is defined as the amount of enzyme required to remove >95% of the carbohydrate from 10 μ g of denatured RNase B in 1 hour at 37°C in a total reaction volume of 10 μ l.
Endo S (200U/ μ l)	ENS-S5143	One unit deglycosylates \geq 95% of 1 μ g human IgG, when incubated in 10 mM sodium phosphate, 150 mM NaCl, pH7.4 at 37°C for 30 min.
PNGase F (500U/ μ l)	PNF-E51H3	One unit is defined as the amount of enzyme required to remove > 95% of the carbohydrate from 10 μ g of denatured RNase B in 1 hour at 37°C in a total reaction volume of 20 μ l.
SpeB (40U/ μ l)	SPB-S5115	One unit digests \geq 95% of 1 μ g human IgG1 when incubated in PBS with 5 mM DTT or TCEP, pH 7.4 at 37°C for 1 hour.
IdeS (20U/ μ l)	IDS-S5143	One unit digests \geq 95% of 1 μ g human IgG when incubated in 10 mM sodium phosphate, 137 mM NaCl, 2.7 mM KCl, pH7.4 at 7°C for 30min.

Featured Data

★ Cat. No. ENH-S5116



One unit remove > 95% of the carbohydrate from 10 µg of denatured RNase B in 1 hour at 37°C in a total reaction volume of 10 µl.

★ Cat. No. SPB-S5115



100 units SpeB digests ≥ 95% of 100 µg human IgG1 in PBS, 5 mM DTT, pH 7.4 at 37°C for 1h.



Scan the QR code for more product information

Anti-idiotypic Antibodies

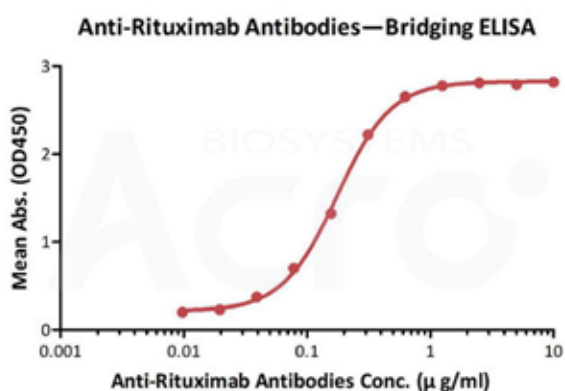
We offer a series of high affinity and high specificity anti-idiotypic antibodies for immunogenicity analysis and pharmacokinetic studies. For each anti-idiotypic antibody, we develop corresponding experimental protocols according to different application scenarios, hoping to accelerate the process of drug discovery and development to the greatest extent possible.

Product List

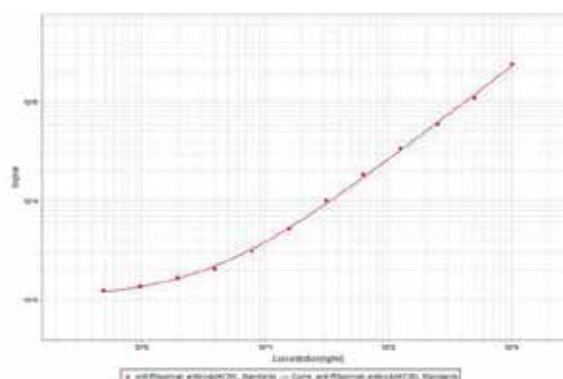
Molecule	Cat. No.	Antigen	Neutralizing Activity	Application
Adalimumab	ADB-Y19	Anti-Adalimumab Antibodies (AY19)	Neutralizing Antibody	ADA assay; Neutralizing assay; Indirect ELISA
Adalimumab	ADB-Y23b	Anti-Adalimumab Antibodies (AY23b) (recommended for PK/PD)	Non-Neutralizing Antibody	PK bridging ELISA; Indirect ELISA
Bevacizumab	BEB-Y10	Anti-Bevacizumab Antibodies (AY10) (MALS verified, recommended for PK/PD)	Neutralizing Antibody	PK bridging ELISA; Neutralizing assay; Indirect ELISA
Bevacizumab	BEB-Y12	Anti-Bevacizumab Antibodies (AY12) (recommended for neutralizing assay)	Neutralizing Antibody	ADA assay; Neutralizing assay; Indirect ELISA
Bevacizumab	BEB-Y9	Anti-Bevacizumab Antibodies (AY9) (recommended for ADA assay)	Neutralizing Antibody	ADA assay; Neutralizing assay; Indirect ELISA
Bevacizumab	BEB-BY13	Biotinylated Anti-Bevacizumab Antibodies (AY13) (recommended for PK/PD)	Neutralizing Antibody	PK bridging ELISA; Neutralizing assay; Indirect ELISA
Cetuximab	CEB-Y27	Anti-Cetuximab Antibodies (AY27) (recommended for ADA assay)	Neutralizing Antibody	ADA assay; Neutralizing assay; Indirect ELISA
Cetuximab	CEB-Y31	Anti-Cetuximab Antibodies (AY31) (Non-Neutralizing)	Non-Neutralizing Antibody	ADA assay; Indirect ELISA
Cetuximab	CEB-Y29	Anti-Cetuximab Antibodies (AY29) (recommended for PK/PD)	Neutralizing Antibody	PK bridging ELISA; Neutralizing assay; Indirect ELISA
Cetuximab	CEB-Y28	Anti-Cetuximab Antibodies (AY28)	Neutralizing Antibody	ADA assay; Neutralizing assay; Indirect ELISA

Molecule	Cat. No.	Antigen	Neutralizing Activity	Application
Cetuximab	CEB-BY31	Biotinylated Anti-Cetuximab Antibodies (AY31) (recommended for PK/PD)	Non-Neutralizing Antibody	PK bridging ELISA; Indirect ELISA
Rituximab	RIB-Y36	Anti-Rituximab Antibodies (AY36) (recommended for ADA assay)	Neutralizing Antibody	ADA assay; Neutralizing assay; Indirect ELISA
Rituximab	RIB-Y37	Anti-Rituximab Antibodies (AY37) (recommended for PK/PD)	Neutralizing Antibody	PK bridging ELISA; Neutralizing assay; Indirect ELISA
Rituximab	RIB-FY35c	FITC-Labeled Anti-Rituximab Antibodies, Mouse IgG1	Neutralizing Antibody	ADA assay; Neutralizing assay; Indirect ELISA
Rituximab	RIB-Y35c	Anti-Rituximab Antibodies (MALS verified)	Non-Neutralizing Antibody	ADA assay; Indirect ELISA
Trastuzumab	TRB-Y5b	Anti-Trastuzumab Antibodies (AY5b) (recommended for PK/PD)	Neutralizing Antibody	PK bridging ELISA
Trastuzumab	TRB-Y1b	Anti-Trastuzumab Antibodies (AY1b) (recommended for PK/PD)	Neutralizing Antibody	PK bridging ELISA; Neutralizing assay; Indirect ELISA

Featured Data



Anti-Rituximab Antibodies bridging ELISA for Anti-Drug Antibody (ADA) assay development. Immobilized Rituximab at 1 $\mu\text{g/ml}$, added increasing concentrations of Anti-Rituximab Antibodies (Cat. No. **RIB-Y36**, 10% human serum) and then added biotinylated Rituximab at 2 $\mu\text{g/ml}$. Detection was performed using HRP-conjugated streptavidin with a sensitivity of 9.7 ng/mL.



Anti-Rituximab Antibodies bridging MSD for Anti-Drug Antibody (ADA) assay development. Added the mix solution (biotinylated Rituximab at 5 $\mu\text{g/ml}$, SULFO-Rituximab at 5 $\mu\text{g/ml}$ and increasing concentrations of Anti-Rituximab Antibodies (Cat. No. **RIB-Y36**, 100% human serum). Detection was performed using MSD Assay with a sensitivity of 0.97 ng/mL.

Quality Characterization Analytical Service

Quality Characterization Analytical Service

Comprehensive solutions: SEC-MALS&UNCle

Comprehensive data analysis: Tm/Particle Size/Molecular Weight

Comprehensive applications: Polymer State Confirmation /Thermal Stability Analysis

Our platform enables the analysis of melting temperature (T_m) and aggregation temperature (T_{agg}), particle size, molecular weight, degree of polymerization, and purity. Both instruments have low sample consumption, high sample throughputs, and are label-free testing methods. With our available technologies, our platform meets the testing needs of antibody evaluation.

Platforms

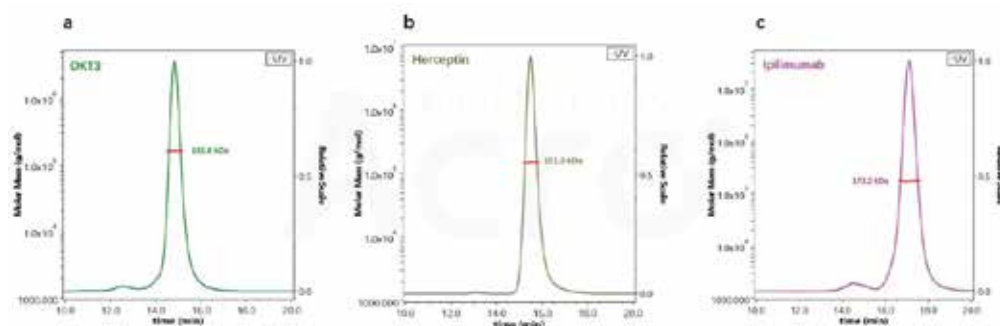
★ SEC-MALS



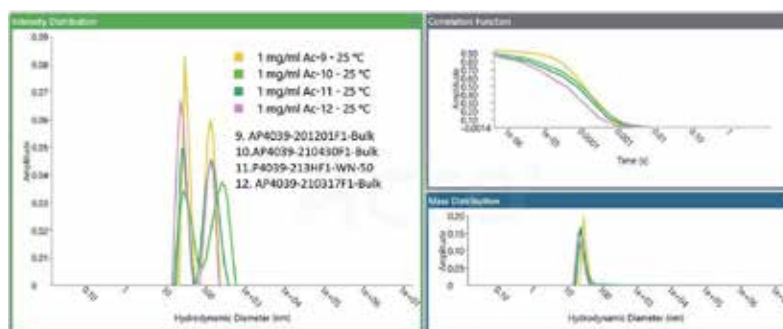
★ UNcle



Case Sharing



Determination of Molecular Weight of Three Antibody Drugs by SEC-MALS



Determination of particle size of S protein

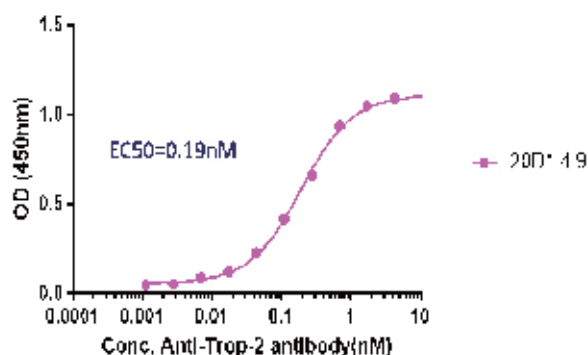


Scan the QR code for more product information

ELISA Service

Enzyme-linked immunosorbent assays (ELISA) have been around as one of the primary methods of analyte detection for decades. Our provides biomedical research and development services for customers seeking quantification and detection of antibodies-antigen interaction. Other services include but are not limited to anti-drug activity (ADA), PK/PD assays as well as antibody screenings.

Featured Data



Binding curve comparing the concentration of anti-TROP-2 antibody (nM) to the optical density to determine the EC50 (SpectraMax i3x).

>>More Related Information: (P17)

SPR/BLI Affinity Sorting and Epitope Analysis Services

Affinity testing assesses the strength of binding between an antibody and its target. By measuring the affinity between an antibody and its target, it is possible to understand the strength and stability of the antibody-target binding. This helps to assess the specificity and affinity of the antibody for the target, thereby determining its mechanism of action and effect.

Platforms

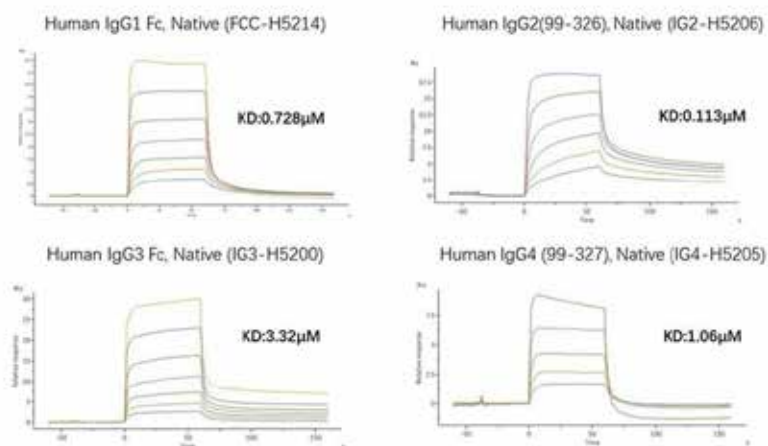
★ Surface Plasmon Resonance (SPR) service



★ Biolayer Interferometry (BLI) service



Case Sharing



The affinity between different IgG antibody subtypes and Human FcRn Protein (Cat. No. FCM-H82W4).

>>More Related Information: (P18)

Anti-idiotype Antibody Development Services, Immunogenic Reagents, and Kit Development Services

Anti-idiotypic Antibody Development Service

- ★ One stop service from antigen preparation to kit development
- ★ ACRO proteins supplied for *FREE*

- Global delivery available with supply chains guaranteed
- Dedicated anti-idiotypic antibody development
- Key reagents for IND filings and clinical trials

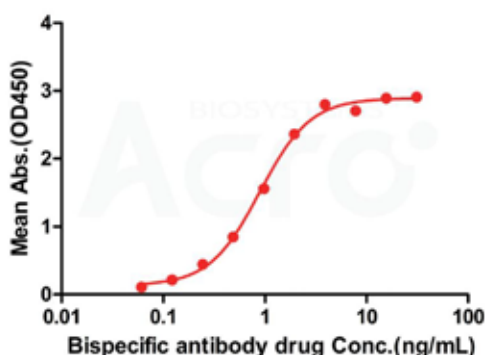
Anti-idiotypic antibodies are antibodies that target the variable region of another antibody to produce specific binding. These antibodies are widely used in drug development: they can be used as an important reference standard for immunogenicity analysis or can be developed to specifically detect antibody drug levels for pharmacokinetic studies.

Featured Service

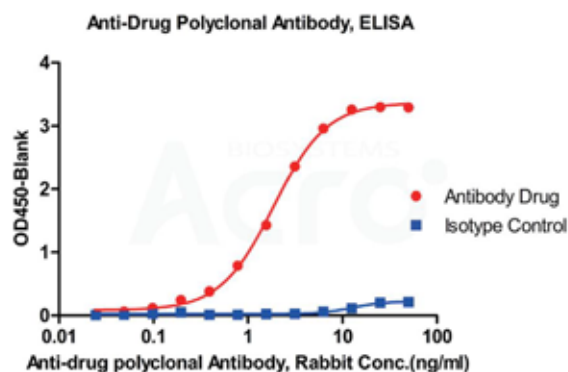
Monoclonal anti-idiotypic antibodies preparation service

Polyclonal anti-idiotypic antibody preparation service

Development of blood drug concentration/immunogenicity detection kit



Immobilized anti-arm1 antibody can bind Bispecific antibody drugs, and then add Biotin- anti-arm2 antibody. Detection was performed using HRP-conjugated streptavidin with a sensitivity of 0.24 ng/mL (Intact Assay).



New Zealand white rabbits were immunized with full-length monoclonal antibodies. The antiserum was affinity purified for polyclonal antibodies specific to the drug. Cross reactivity to subtype control was less than 2%.

CMC-Manufacturing

In the phase of antibody drug production, the modified antibody gene is introduced into an appropriate expression system (e.g., bacteria, yeast, mammalian cells, etc.) to enable the expression and production of large quantities of antibody protein. This usually involves steps such as construction of appropriate expression vectors, cell culture and fermentation, and protein purification. At the same time, in order to ensure the success of drug development and shorten the development cycle. The production process must focus on the analysis of the quality characterization of the antibody drug and the accurate detection of nuclease residues.

Scale-up Production

Large-scale production of therapeutic antibodies in the CMC process involves cell culture, purification, formulation to ensure safe and effective therapies in sufficient quantities. In the production of the drug substance, cell culture techniques are typically employed for large-scale production of the target antibody using expression systems.

Recombinant Antibody Service

Recombinant Antibody Services

- ★ High-throughput Antibody Expression
- ★ Large-scale Antibody Production

The large-scale production of antibodies involves many complex processes such as cell culture and purification. We can optimize the culture and production plan according to customer's large-scale production needs, and provide recombinant antibody production services from gram to kilogram according to the standard of endotoxin <1EU/mg. Trust our service to shorten your development time.

Service Scope

High-throughput Recombinant Antibody Expression Service

- CHO/HEK293-based Cell Expression Platform.
- 2-3 weeks to delivery of purified antibodies.
- Application-based customizable service including production method, concentration, etc.



Antibody Class Switching Service

- One-stop service from gene construction to expression from antibody (or VH/VL) sequence information.
- Antibody class switching services are available. (e.g. switching from hybridoma mouse antibody to human antibody IgG1/2/3/4).



Mouse IgG



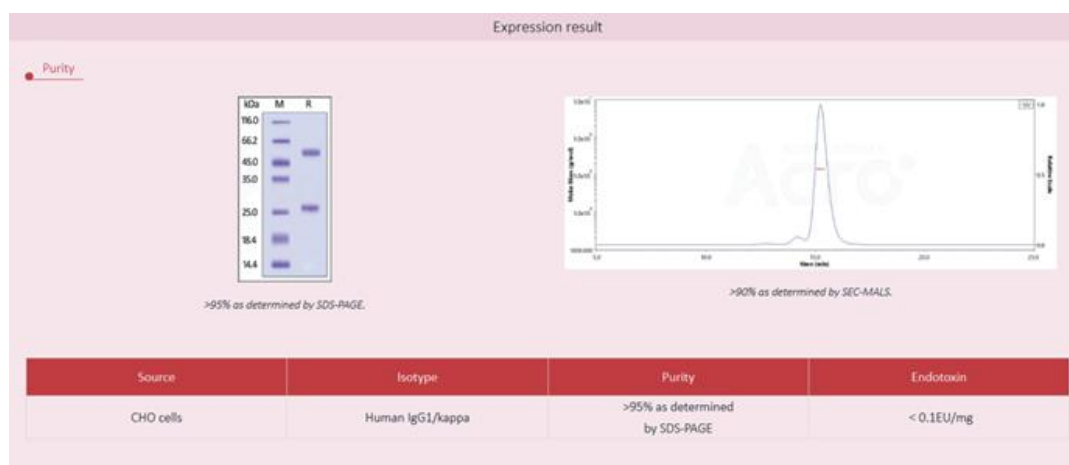
Human IgG

Large-scale Recombinant Antibody Production Service

- Large-scale Production services supporting gram to kilogram of recombinant antibodies.
- Low Endotoxin levels: <1EU/mg.
- 50L-200L Bioreactors.
- Customizable production plan to support the customer needs.



Case Sharing



Scan the QR code for more product information

■ Purification Process Development

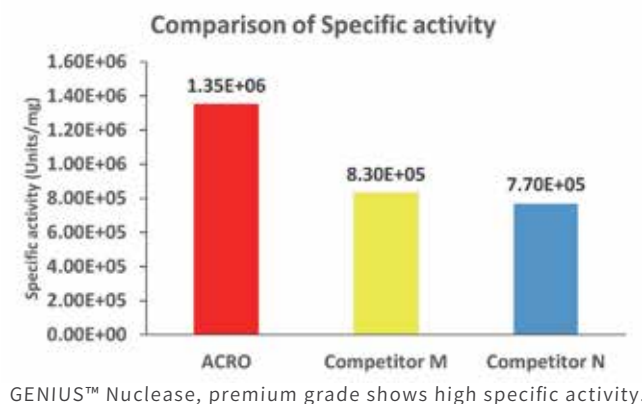
The detection of nuclease residues is very important during the development of antibody drug purification processes. If nuclease residues are present in the final antibody drug, they may degrade the nucleic acid molecules of the antibody, leading to a decrease in the quality of the antibody and an increase in instability. Therefore, accurate detection of nuclease residues is essential to ensure the activity and safety of relevant biologics. and safety of the biologics in question.

GENIUS™ Nuclease

Residues of nuclease can have an impact on the application of biologics and may cause toxicity or immune reactions. Therefore, accurate detection of nuclease residues is essential to ensure the activity and safety of biologics. We offer GENIUS™ Nuclease to assist in the development of antibody drug purification processes, particularly for the purification and subsequent detection of residues in the production of Enterobacteriaceae.

Featured Data

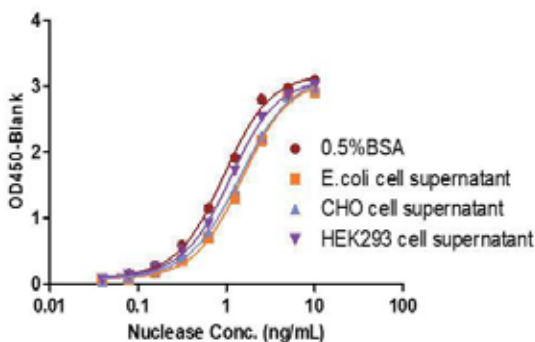
★ Cat. No. NUE-S5119



Nuclease Residue Detection Kits

Nuclease residues are also one of the important indicators of the quality of biologics in the regulation of safety in biologics. Our GENIUS™ Nuclease ELISA Kit is an ELISA sandwich assay for the quantitative analysis of nuclease residues in biologics to assist in the development of antibody purification processes.

Featured Data



GENIUS™ Nuclease ELISA Kit (Residue Testing) (Cat. No. CRS-A016) can detect the nuclease in different culture supernatant with similar curve and sensitivity.

■ Formulation Process

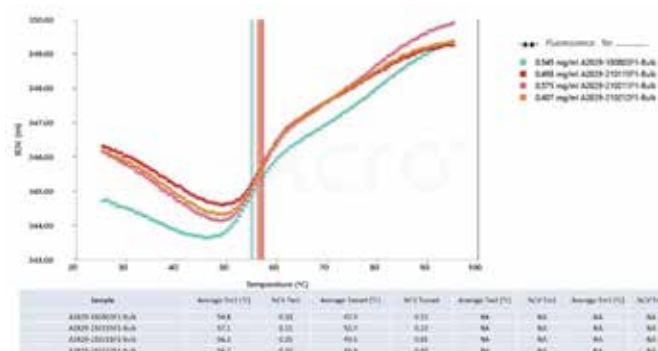
An important challenge in the development of biologics compared to small molecule drugs is their stability. Understanding the stability behavior of biopharmaceuticals under various conditions through analytical characterization, combined with a good understanding of the fundamental properties of proteins, can enable formulators to more rationally design prescriptions and identify potential problems during manufacture, storage, and use, thus minimizing the need for ad hoc or major changes to formulations during development.

UNcle Quality Characterization Analytical Service



UNcle is a technology platform that tracks the folding state of protein by detecting the changes in its endogenous fluorescence through full-wavelength fluorescence. This determines the T_m of the protein stability and reflects the thermal stability or chemical stability of the protein, and thus the structure and stability of the antibody can be evaluated.

Case Sharing



A2829-180803F1 Bulk T_m is relatively low, and the initial BCM value is significantly lower than that of the other three samples. It is speculated that its initial conformation state is different from that of the other three samples. The T_m detection value is also different from the other three samples.

>>More Related Information: (P43)

CMC- Quality Control

Quality control plays an important role in antibody development. During the development of antibody drugs, quality control is carried out throughout to ensure the consistency, stability and safety of the products. Strict implementation of quality control helps to improve the quality, reliability and reproducibility of antibody drugs and ensure their safety and efficacy in clinical applications.

■ Bioactivity Evaluation: *In Vitro* Functional Assay

In vitro functional validation is a crucial part of the biological activity assay of antibody drugs. It aims to assess the functional impact of an antibody drug on a specific target molecule or cell in an *in vitro* environment. The process involves assays such as binding affinity measurements and cell binding assays to obtain important information about the effect of the antibody drug on the target molecule or cell, providing guidance for quality control.

Target Proteins

Our target protein solutions, are tailored for precise and comprehensive activity and *in vitro* functional evaluations using ELISA, SPR, BLI, and more. Our premium-quality products with exceptional sensitivity, specificity, and reproducibility, enabling you to unravel the mysteries of cellular interactions and gain deeper insights into disease mechanisms.

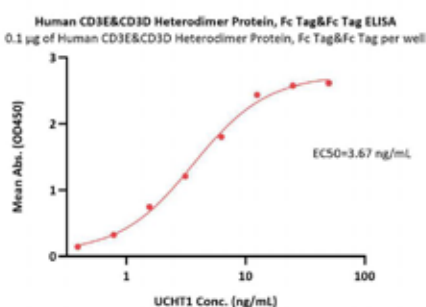
Featured Product

FLAG Transmembrane Proteins

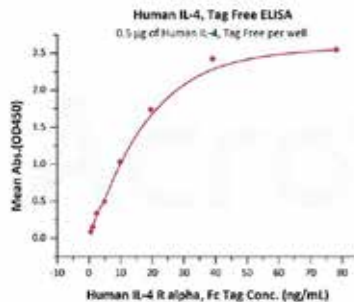
Cytokine Target Proteins

CD3 Proteins

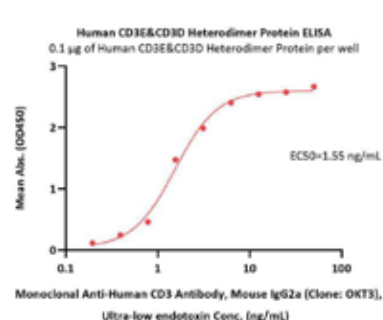
Featured Data



Immobilized Human CD3E&CD3D Heterodimer Protein, Fc Tag & Fc Tag (Cat. No. **CDD-H5255**) at 1 µg/mL (100 µL/well) can bind UCHT1 with a linear range of 0.8-6 ng/mL (Routinely tested).



Immobilized ActiveMax® Human IL-4, Tag Free (Cat. No. **IL4-H4218**) at 5 µg/mL (100 µL/well) can bind Human IL-4 R alpha, Fc Tag (Cat. No. **ILR-H5253**) with a linear range of 1-20 ng/mL.



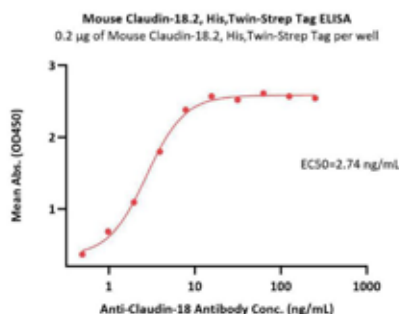
Immobilized Human CD3E&CD3D Heterodimer Protein (Cat. No. **CDD-H5255**) at 1 µg/mL (100 µL/well) can bind Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), premium grade (Cat. No. **CDE-M120a**) with a linear range of 0.2-3 ng/mL (QC tested).

>>More Related Information: (P03)

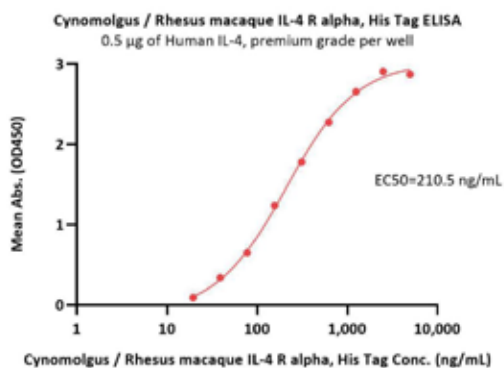
Multiple Species Target Proteins

Multiple species target proteins enable the evaluation of protein functionality across different species, ensuring consistent and reliable performance. Our diverse range of multiple species target protein products offers high-quality and well-characterized proteins for accurate activity assessment. Explore our selection of multiple species target proteins to enhance your quality control processes and ensure the effectiveness of your research and applications.

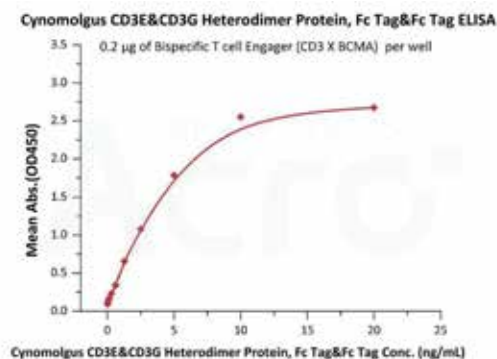
Featured Data



Immobilized Mouse Claudin-18.2, His,Twin-Strep Tag (Cat. No. **CL2-M5585**) at 2 µg/mL (100 µL/well) can bind Anti-Claudin-18 Antibody with a linear range of 0.2-31 ng/mL (QC tested).



Immobilized Human IL-4, premium grade (Cat. No. [IL4-H4218](#)) at 5 µg/mL (100 µL/well) can bind Cynomolgus / Rhesus macaque IL-4 R alpha, His Tag (Cat. No. [ILR-C52H8](#)) with a linear range of 39-312 ng/mL (QC tested).



Immobilized Bispecific T cell Engager (CD3 X BCMA) at 1 µg/mL (100 µL/well) can bind Cynomolgus CD3E&CD3G Heterodimer Protein, Fc Tag&Fc Tag (Cat. No. [CDG-C5257](#)) with a linear range of 0.3-5 ng/mL (QC tested).

>>More Related Information: (P03)

Inhibitor Screening Kits

Antibody drugs can produce therapeutic effects by blocking or neutralizing the interaction between proteins. Our Inhibitor screening kits can help customers to screen and validate drugs quickly, which can effectively improve the efficiency of R&D.

Featured Product

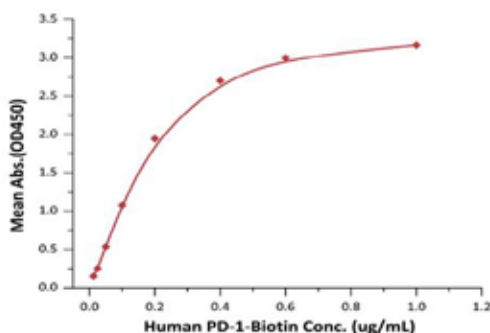
CD47: SIRP alpha [Biotinylated] Inhibitor Screening ELISA Assay Pair

CD47 [Biotinylated]: SIRP alphav2 Inhibitor Screening ELISA Kit

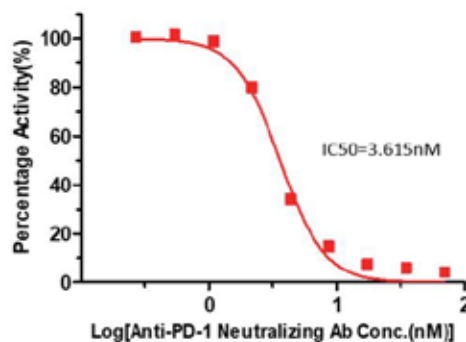
IL-12B: IL-12RB1[Biotinylated] Inhibitor Screening ELISA Kit

Featured Data

★ Cat. No. EP-101



Immobilized human PD-L1 protein at 2 µg/mL (100 µL/well) can bind human PD-1-Biotin with a linear range of 0.01 - 0.2 µg/mL when detected by Streptavidin-HRP. The background was subtracted from data points before curve fitting.



Serial dilutions of anti-PD-1 neutralizing antibody (1:1 serial dilution, from 10 µg/mL to 0.078 µg/mL (69.628 nM to 0.544 nM) was added into PD-L1: PD-1-Biotin binding reactions. The assay was performed according to the above described protocol. The background was subtracted from data points prior to log transformation and curve fitting.

>>More Related Information: (P10)

ComboX: Streptavidin Series Products

Streptavidin series products provide a reliable and versatile platform for evaluating the binding and functionality of biotinylated molecules. Our comprehensive range of Streptavidin series products offers high-quality and consistent performance, ensuring accurate activity assessment. Explore our selection of Streptavidin series products to enhance your quality control processes and ensure the reliability and effectiveness of your research and applications.

Featured Product

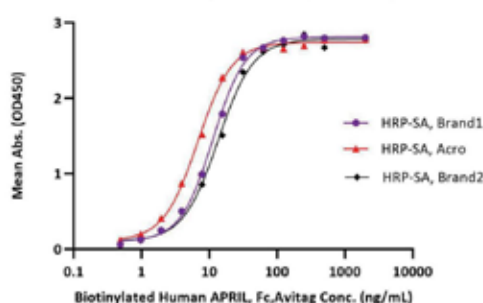
SA Proteins

SA Coated Plates

SA Magnetic Beads

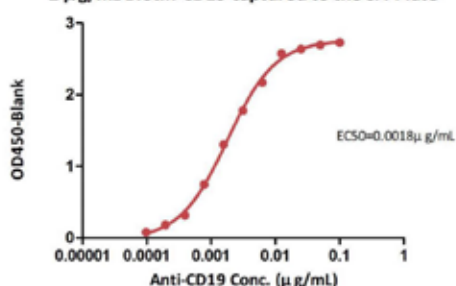
Featured Data

Streptavidin-HRP, Horseradish peroxidase conjugated Streptavidin ELISA



Measure performance comparison between Acro (Streptavidin Protein-HRP, STN-NH913, Horseradish peroxidase conjugated Streptavidin) and other competitive products. With tight quality control measures, Acro has better sensitivity than other brands.

5 µg/mL SA Coated onto Plate per well
1 µg/mL Biotin-CD19 captured to the SA-Plate



Immobilized Biotinylated Human CD19 (20-291), His,Avitag (Cat. No. CD9-H82E9) at 1 µg/mL (100 µL/well) on Streptavidin Coated Plates, Clear, 96-Well (Cat. No. SP-11), can bind Anti-FMC63 antibody with a linear range of 0.1-3 ng/mL (QC tested).

>>More Related Information: (P13)

ComboX: Universal Antibodies

Universal antibodies are allowed for the evaluation of various targets across different species and applications, ensuring consistent and reliable performance. Our versatile range of universal antibodies offers high-quality and specific binding, enabling accurate activity assessment. Explore our selection of universal antibodies to enhance your quality control processes and ensure the effectiveness of your research and applications.

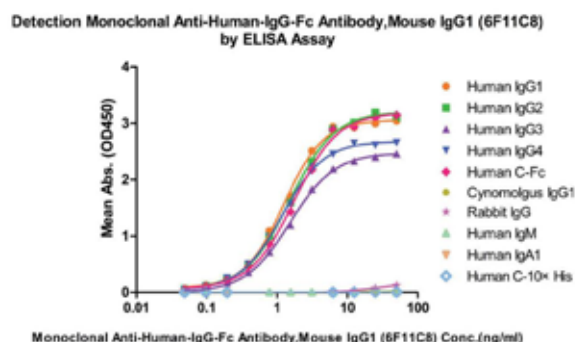
Featured Product

Anti-His Antibody

Anti-Human IgG Antibody

Anti-MMAE Antibody

Featured Data



AM359b (Cat. No. [SPD-M265](#), [SPD-M400a](#), [SPD-M401a](#), [SPD-M402a](#)) immobilized Anti-SARS-CoV-2 Spike RBD broadly neutralizing antibodies (Human IgG1, IgG2, IgG3, IgG4) and AC2-H5257 Human ACE2/ACEH Protein (Cat. No. [AC2-H5257](#)) bind 6F11C8 Monoclonal Anti-Human-IgG-Fc Antibody (Cat. No. [IGG-AY69](#)). Not binding: AM122 (Cat. No. [SPD-M201](#)), Omicron Antibody-3A7C12 (Cat. No. [SPD-C73](#)), AM122 (Cat. No. [SPD-M162](#)), AM130 (Cat. No. [S1N-M164](#)), and CD9-H52H2 Human CD19 Protein (Cat. No. [CD9-H52H2](#)). (HPLC verified, routinely tested).

>>More Related Information: ([P14](#))

ComboX: Isotype Control

Isotype controls provide a baseline for comparison, allowing for the differentiation of specific binding from non-specific background signals. Our comprehensive range of isotype control products offers high-quality and well-characterized antibodies for accurate activity evaluation. Explore our selection of isotype controls to enhance your quality control processes and ensure reliable and consistent results in your research and applications.

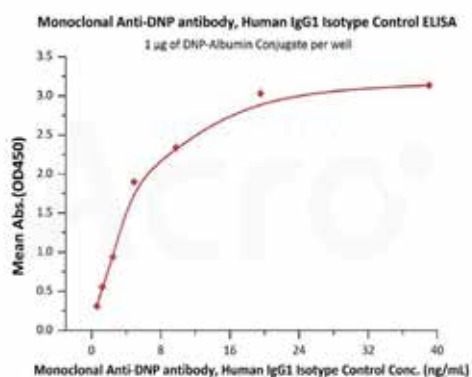
Featured Product

IgG Isotype Controls

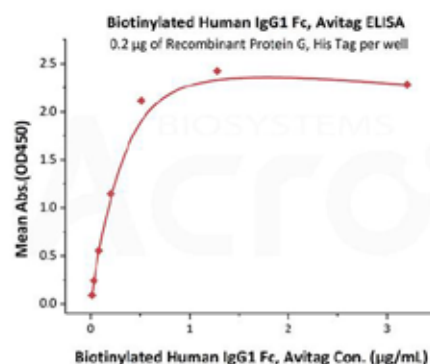
IgG Fc Proteins

Serum Albumin

Featured Data



Immobilized DNP-Albumin Conjugate at 10 µg/mL (100 µL/well) can bind Human IgG1 Kappa Isotype Control (mAb) (Cat. No. [DNP-M2](#)) with a linear range of 1-10 ng/mL (QC tested).



Immobilized Recombinant Protein G, His Tag (Cat. No. [RPG-S3140](#)) at 2 µg/mL (100 µL/well) can bind Biotinylated Human IgG1 Fc, Avitag (Cat. No. [IG1-H8213](#)) with a linear range of 0.013-0.512 µg/mL.

>>More Related Information: ([P15](#))

SPR/BLI Analysis Services

In the biological activity assay phase of an antibody drug, the role of affinity assay is to assess the strength of binding between the antibody and the target molecule, as well as its functional impact on the target molecule. It is one of the important tools to determine the biological activity and potency of an antibody drug.

Platforms

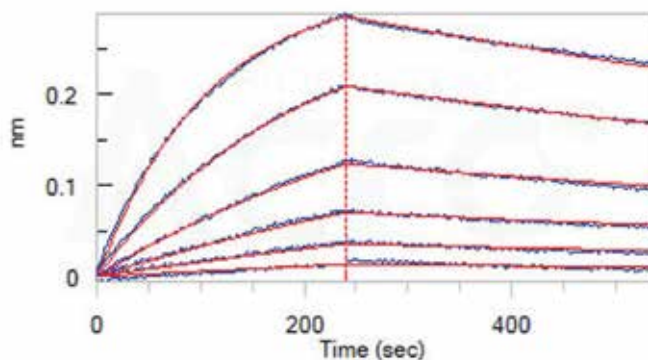
★ Surface Plasmon Resonance (SPR) service



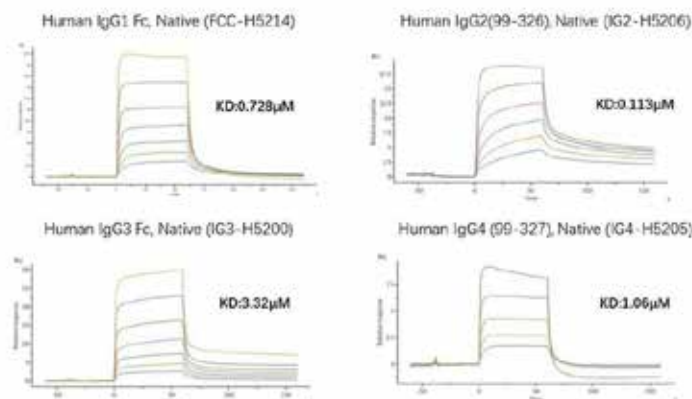
★ Biolayer Interferometry (BLI) service



Case Sharing



Loaded Opdivo (Nivolumab) on Protein A Biosensor, can bind Human PD-1, His Tag (HPLC-verified) (Cat. No. [PD1-H5221](#)) with an affinity constant of 5.09 nM as determined in BLI assay (ForteBio Octet Red96e).



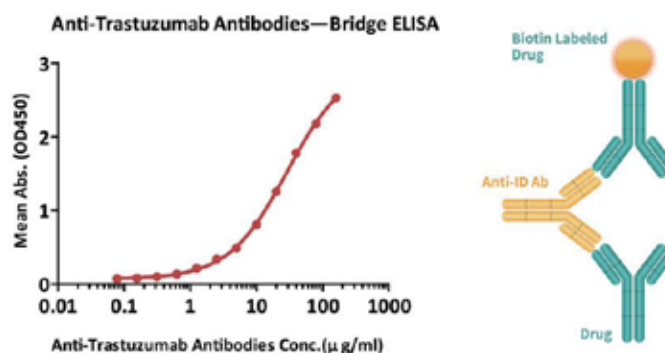
The affinity between different IgG antibody subtypes and Human FcRn Protein (Cat. No. [FCM-H82W4](#)).

>>More Related Information: ([P18](#))

CMC Release Method Development Service-ELISA

ELISA as the workhorse experiment of drug development research, high quality and reliable ELISA data is critical for bioactivity evaluation and further investigations. we can develop customized CMC release methods based on the ELISA platform for your diverse needs and applications, and provide the necessary analytical method validation, testing and documentation to support your filing.

Case Sharing



Immobilized Adali**mab at 1 μg/ml, add increasing concentrations of anti-Adali**mab antibodies (Cat. No. ADB-Y19, 10% human serum) and then add biotinylated Adali**mab at 5 μg/ml. Detection was performed using HRP-conjugated.

>>More Related Information: (P17)

■ Bioactivity Evaluation: *In Vitro* Functional Assay - Mechanism of Action

The role of *in vitro* mechanism of action assays in the quality control phase of antibody drugs is very important. It can determine the functional effects of antibody drugs on target molecules or cells, assess the potency and specificity of the drug, reveal the mechanism of action of the drug, and evaluate the consistency and stability of the drug. The results of these assays provide a key scientific basis for the development, manufacture and clinical application of antibody drugs.

Target Proteins

Our target protein solutions, are tailored for precise and comprehensive activity and *in vitro* functional evaluations using ELISA, SPR, BLI, and more. Our premium-quality products with exceptional sensitivity, specificity, and reproducibility, enabling you to unravel the mysteries of cellular interactions and gain deeper insights into disease mechanisms.

Featured Product

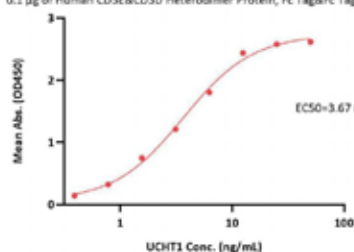
FLAG Transmembrane Proteins

Cytokine Target Proteins

CD3 Proteins

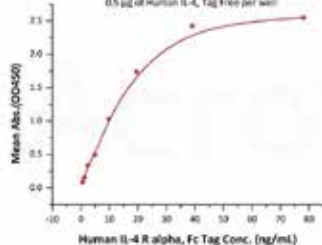
Featured Data

Human CD3E&CD3D Heterodimer Protein, Fc Tag&Fc Tag ELISA
0.1 µg of Human CD3E&CD3D Heterodimer Protein, Fc Tag&Fc Tag per well



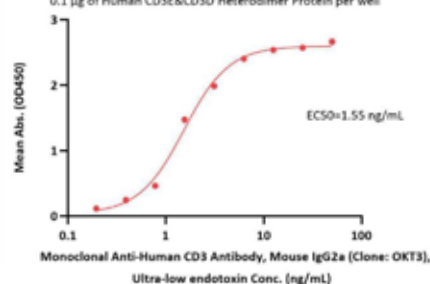
Immobilized Human CD3E&CD3D Heterodimer Protein, Fc Tag & Fc Tag (Cat. No. **CDD-H5255**) at 1 µg/mL (100 µL/well) can bind UCHT1 with a linear range of 0.8-6 ng/mL (Routinely tested).

Human IL-4, Tag Free ELISA
0.5 µg of Human IL-4, Tag Free per well



Immobilized ActiveMax® Human IL-4, Tag Free (Cat. No. **IL4-H4218**) at 5 µg/mL (100 µL/well) can bind Human IL-4 R alpha, Fc Tag (Cat. No. **ILR-H5253**) with a linear range of 1-20 ng/mL.

Human CD3E&CD3D Heterodimer Protein ELISA
0.1 µg of Human CD3E&CD3D Heterodimer Protein per well



Immobilized Human CD3E&CD3D Heterodimer Protein (Cat. No. **CDD-H52Wa**) at 1 µg/mL (100 µL/well) can bind Monoclonal Anti-Human CD3 Antibody, Mouse IgG2a (Clone: OKT3), premium grade (Cat. No. **CDE-M120a**) with a linear range of 0.2-3 ng/mL (QC tested).

>>More Related Information: (P03)

Cytokines for Cell Culture (Premium Grade)

Cytokines play a crucial role in cell culture-based pharmacodynamic studies of antibody drugs. The effects of drugs on cytokine pathways are studied to identify therapeutic targets and to assess their anti-inflammatory and anti-tumour activities. The results of these assays are important for the evaluation of antibody drugs.

Featured Product

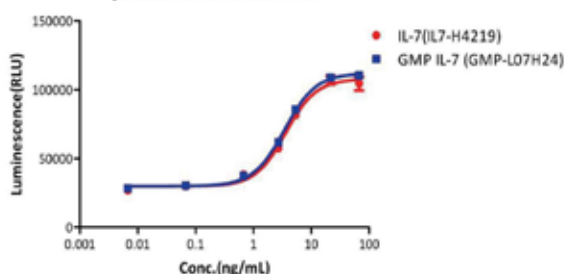
Human IL-7 Protein, premium grade

Biotinylated Human CD5 Protein, His,Avi tag, premium grade

Human DLL4 Protein, Fc Tag, premium grade

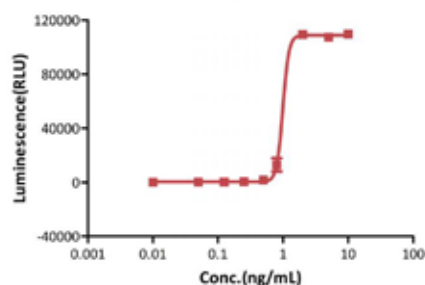
Featured Data

Human IL-7 Protein, premium grade stimulates proliferation of PBMC cells



Human IL-7 Protein premium grade (Cat. No. **IL7-H4219**) designed for preclinical stage, has the same activity and performance with GMP Grade IL-7 (Cat. No. **GMP-L07H24**), which enables a seamless transition from preclinical development to clinical phases.

Human IL-15 stimulates proliferation of CTLL-2



Human IL-15, premium grade (Cat. No. **IL5-H4117**) stimulates proliferation of CTLL-2 cells. The EC50 for this effect is 0.9946 ng/mL, corresponding to a specific activity of $> 0.8 \times 10^7$ IU/mg, which is calibrated against human IL-15 WHO International Standard (NIBSC code: 95/554) (QC tested).

>>More Related Information: (P27)

T cell Activation/Expansion Reagents (Premium Grade)

T cell activation and expansion reagents are essential tools for cell-based antibody drug pharmacodynamic studies, especially evaluating the effects of antibody drugs on T cells. Our products are intended for the *in vitro* isolation, stimulation and expansion of purified T cell populations. Trust our product to streamline research and accelerate the drug development process.

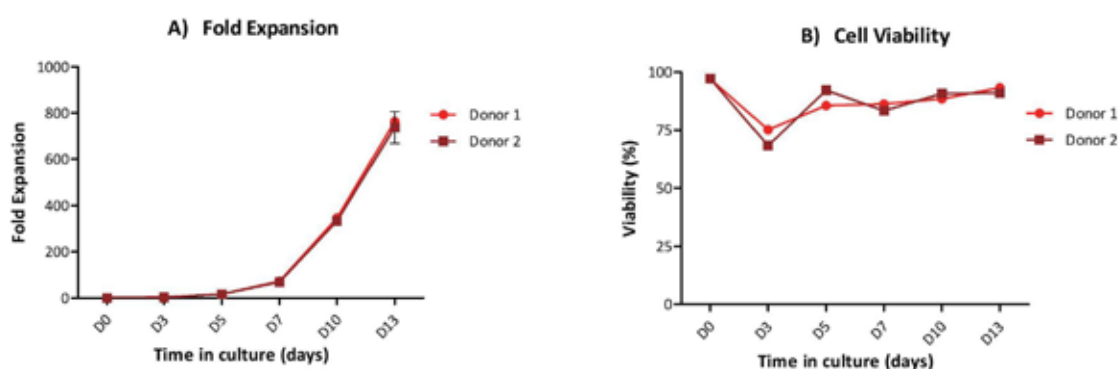
Featured Product

Cell Activation: CD3/CD28 Activation Beads

Cell Culture: Ultralow Endotoxin Cytokines, Premium Grade

Residue analysis: Cytokine ELISA Kit, Anti-CD3/CD28 Antibody Kit

Featured Data



Purified human T Cells expansion. The purified human T cells were stimulated using ActiveMax® Human T cell Activation/-Expansion CD3/CD28 Beads, premium grade DMF Filled (Cat. No. [MBS-C001](#)) at a ratio of 1:1. beads-to-cells. Cells were expanded in T cell culture medium supplemented with 4ng/mL of rhIL-2 Protein (ACROBiosystems, Cat. No. [IL2-H4113](#)). Activated Cells were expanded for up to 13 days (A) with high cell viability (B).

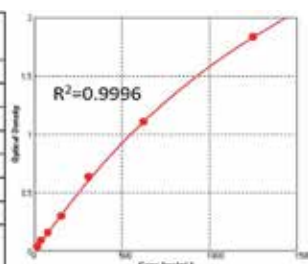
>>More Related Information: (P27)

Cytokine Detection ELISA Kits

Cytokine detection ELISA kits are used to evaluate bioactivity and ensure quality control. These kits quantitatively measure cytokine levels in samples. *In vitro* functional assays help understand cytokine mechanisms. Quality control involves rigorous testing to validate accuracy, precision, and sensitivity. Following manufacturer instructions and using controls ensures reliable results. Overall, cytokine ELISA kits are valuable for assessing bioactivity and understanding cytokine function, with quality control being crucial for reliable data.

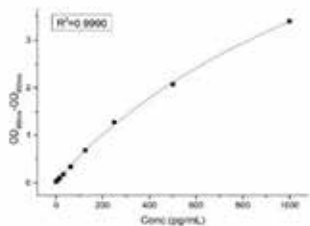
Featured Data

IFN-γ Calibrator (pg/mL)	OD _{450nm} Values
1250	1.888
625	1.156
312.5	0.686
156.25	0.352
78.125	0.207
39.0625	0.142
19.53125	0.088
Blank	0.052



The sensitivity of Human Interferon-γ (IFN-γ) ELISA Kit (Cat. No. [CRS-A017](#)) is 5.309 pg/mL.

IFN- γ Calibrator (pg/mL)	OD _{450nm} (Mean)
1000	3.228
500	2.012
250	1.184
125	0.632
62.5	0.318
31.25	0.169
15.6	0.09
7.81	0.053
Blank	0.016



The sensitivity of Human IFN- γ ELISA Kit, PRO (Cat. No. **CEA-C006**) is 3.25 pg/mL.

>>More Related Information: (P30)

ComboX: Isotype Controls

Enhance bioactivity with our comprehensive range of isotype control products. Eliminate non-specific effects and empower drug developers in their quest for reliable evaluation assay. Trust our solutions to streamline research and accelerate the drug development process.

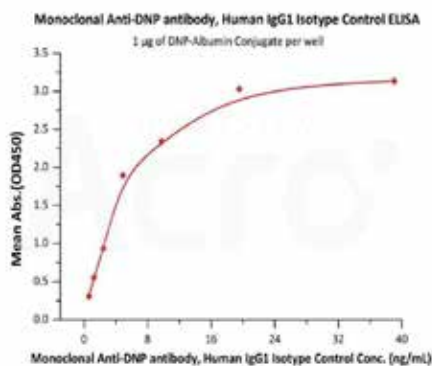
Featured Product

IgG Isotype Controls

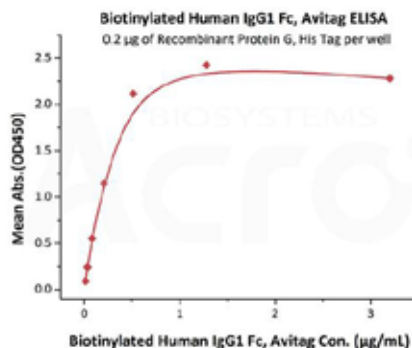
IgG Fc Proteins

Serum Albumin

Featured Data



Immobilized DNP-Albumin Conjugate at 10 μ g/mL (100 μ L/well) can bind Human IgG1 Kappa Isotype Control (mAb) (Cat. No. **DNP-M2**) with a linear range of 1-10 ng/mL (QC tested).



Immobilized Recombinant Protein G, His Tag (Cat. No. **RPG-S3140**) at 2 μ g/mL (100 μ L/well) can bind Biotinylated Human IgG1 Fc, Avi tag (Cat. No. **IG1-H8213**) with a linear range of 0.013-0.512 μ g/mL.

>>More Related Information: (P15)

Immunological Activity Evaluation: *In Vitro* Functional Assay- Affinity

Fc Receptor Proteins

Partner with us to accelerate your research and advance affinity characterization across different species through seamless cross-species experimental validation using our diverse portfolio of recombinant Fc receptor proteins, including a variety of common variants.

Featured Product

FcRn

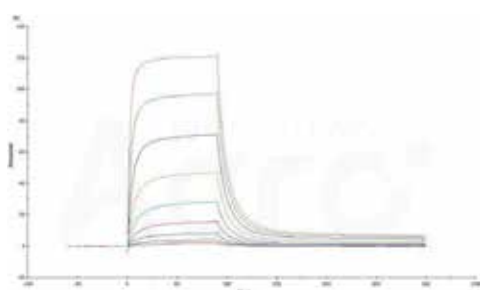
Fc γ RI/CD64

Fc γ RII/CD32

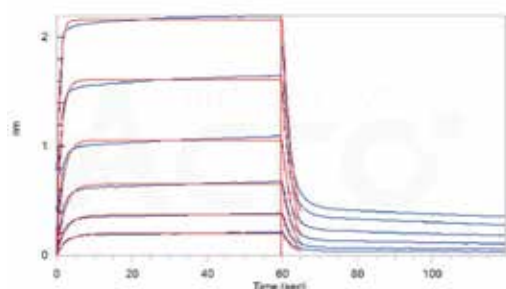
Fc γ RIII/CD16

Fc ϵ R

Featured Data



Biotinylated Mouse CD64, His, Avi tag (Cat. No. **CD4-M82E7**) captured on Biotin CAP - Series S sensor Chip can bind Herceptin with an affinity constant of 59.8 nM as determined in a SPR assay (Biacore T200) (QC tested).



Loaded Biotinylated Cynomolgus CD32a, His, Avi tag (Cat. No. **CDA-C82E5**) on SA Biosensor, can bind MabThera® (Rituximab) with an affinity constant of 2 μ M as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested) determined in a SPR assay (Biacore T200) (QC tested).

>>More Related Information: (**P08**)

SPR/BLI Affinity Analysis Services

SPR and BLI assays are used in antibody drug quality control to measure affinity. These assays provide real-time data on antibody-antigen, antibody-Fc receptor interactions, helping to evaluate the efficacy and quality of the drug. Our standardized protocols and controls ensure accurate and reliable results.

Platforms

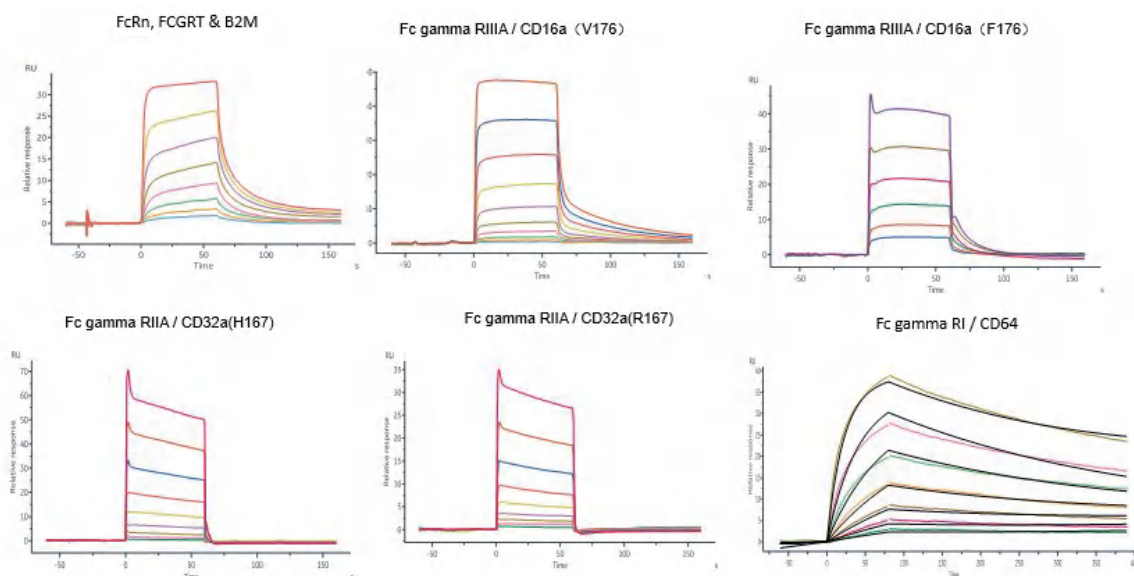
★ Surface Plasmon Resonance (SPR) service



★ Biolayer Interferometry (BLI) service



Case Sharing



Ligand	Analyte	KD (M)
FcRn (FCGR2 & B2M) (Cat. No. FCN-H52W7)	BsAb-IgG	1.07E-06
Fc gamma RIIIA / CD16a (V176) (Cat. No. CD8-H52H4)		1.54E-06
Fc gamma RIIIA / CD16a (F176) (Cat. No. CDA-H5220)		5.23E-06
Fc gamma RIIIA / CD32a (R176) (Cat. No. CDA-H5221)		4.50E-06
Fc gamma RIIIA / CD32a (H167) (Cat. No. CD1-H5223)		2.43E-06
Fc gamma RI / CD64 (Cat. No. FCA-H52H1)		5.50E-09

Bispecific antibody (BsAb-IgG) binding with Fc gamma Receptor

>>More Related Information: (P18)

Antibody Immunological Activity Detection: *In Vitro* Functional Assay - Cell Lines

In vitro functional assays using cell lines play a crucial role in antibody quality control. These assays assess the immunological activity of antibodies by measuring their effects on cellular functions. Standardized protocols and controls are used to ensure reliable results and confirm antibody functionality.

Overexpression stable cell lines

Overexpression stable cell lines are a genetically modified stable cell line designed to continuously overexpress a specific gene. A specific gene is designed to increase the expression level and subsequently introduced into cells using methods such as lentiviruses and electroporation to achieve 'Gain-of-Function'. The resulting cell then expresses the target antigen on the cell membrane surface, a function which is retained across multiple cell passages.

Featured Product

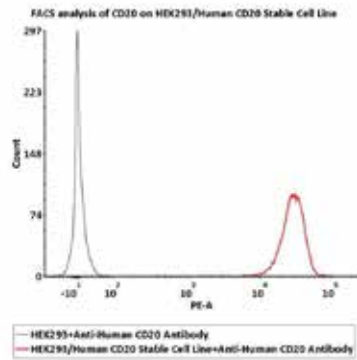
HEK293/Human TL1A Stable Cell Line

HEK293/Human Integrin alpha V beta 6 Stable Cell Line

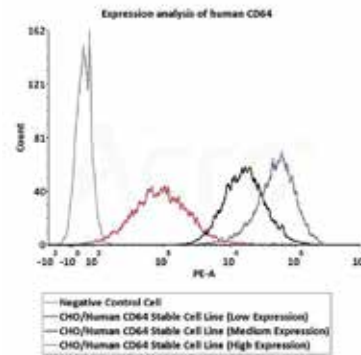
HEK293/Human CD20 Stable Cell Line

HEK293/Human Transferrin R Stable Cell Line

Featured Data



FACS assay shows that Monoclonal Anti-Human CD20 Full Length Antibody, Human IgG1 can bind to HEK293/Human CD20 Stable Cell Line. HEK293/Human CD20 Stable Cell Line was the red line, Negative control HEK293 cell was the grey line (QC tested).



Expression analysis of human CD64 on CHO/Human CD64 Stable Cell Line by FACS. Cell surface staining using PE-labeled anti-human CD64 antibody was performed on CHO/Human CD64 Stable Cell Line with different expression levels: CHO/Human CD64 Stable Cell Line (Low Expression) (Cat. No. [SCCHO-ATP062L](#)); CHO/Human CD64 Stable Cell Line (Medium Expression) (Cat. No. [SCCHO-ATP062M](#)); CHO/Human CD64 Stable Cell Line (High Expression) (Cat. No. [SCCHO-ATP062H](#)).

>>More Related Information: (P04)

Reporter Cell Lines

Cellular-level evaluation is a key indicator for drug efficacy *in vitro* and is widely used throughout the drug development process. we uses a luciferase reporter gene system to establish a reporter gene cell platform and continues to develop a series of high-quality reporter gene cell line products. The series of cell line products are verified for functionality and stability and designed to be applied to signal transduction function research, early drug discovery and screening, and CMC quality control release.

Featured Product

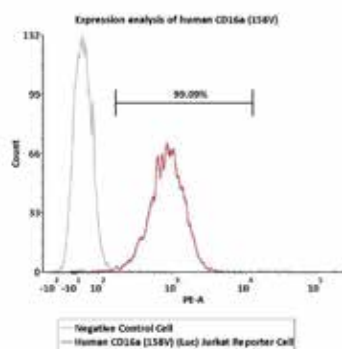
ADCC/ADCP functional verification

Target & Transduction research

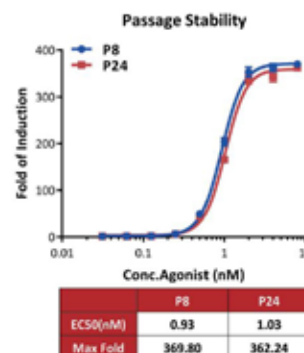
Cross-linking drug evaluation

Immune checkpoint drug research

Featured Data



Human CD16a (158V) (Luc) Jurkat Reporter Cell or negative control cell was stained with PE-labeled anti-human CD16a antibody.

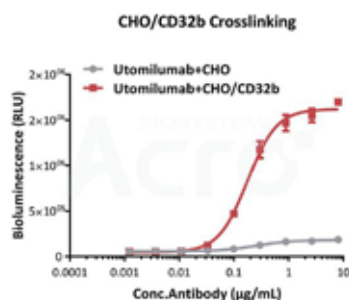


The continuously growing Human GLP-1R (Luc) HEK293 Reporter Cell was stimulated with serial dilutions of Tirzepatide (a dual GLP-1R and GIPR agonist). Tirzepatide stimulated response demonstrates passage stabilization (fold induction and EC50) across passage 8-24.

Cell Line Customize Service

The key factor of the developmental process of new therapeutics in the activity determination of antibody therapeutic drugs. Transgenic cell lines are widely used due to their simplicity, speed, accuracy, non-biological safety, and animal substitution. Activity determination could be performed in various ways. However, *in vitro* evaluation is a critical part of drug development and quality control. ACROBiosystems offers customization services for overexpression cell line to help you develop that perfect cell line.

Featured Data



Bioactivity analysis of anti-human 4-1BB antibody through CHO/Human CD32b Stable Cell Line (Medium Expression) (Cat. No. **SCCHO-ATP060M**) crosslinking to test whether in a CD32b-dependent manner to strengthen the agonistic activity. The EC₅₀ of anti-human 4-1BB antibody is approximately 0.18 µg/mL through CHO/Human CD32b Stable Cell Line (Medium Expression) crosslinking.

■ Structural and Thermal Stability Analysis

Structural and thermal stability analysis is a critical aspect of antibody drug quality control. These analyses assess the antibody's three-dimensional structure, conformational integrity, and thermal stability. By evaluating these parameters, researchers can ensure the quality, stability, and efficacy of the antibody drug.

Enzymes for Antibody Characterization

We offer a range of enzymes for antibody characterization during structural and thermal stability analysis in antibody quality control. These enzymes aid in assessing antibody degradation, glycosylation patterns, nucleolytic stability, and disulfide bond integrity. Our enzymes are designed to provide accurate and reliable results for antibody quality control purposes.

Featured Product

IdeS

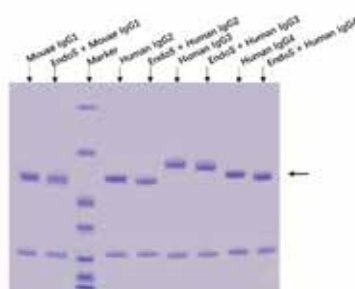
SpeB

Endo H

Endo S

...

Featured Data



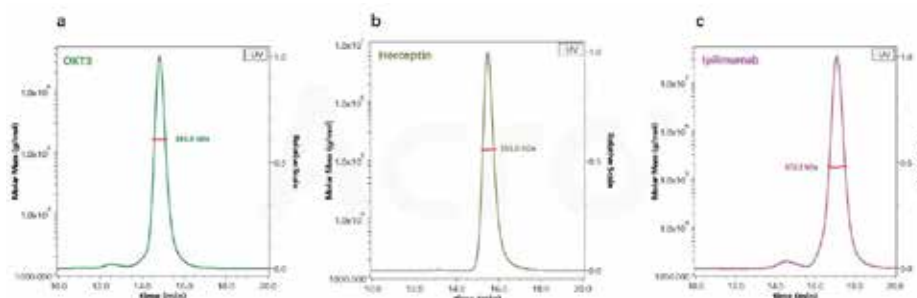
100 unit EndoS deglycosylates $\geq 95\%$ of 100 µg IgG when incubated in 10 mM sodium phosphate, 150 mM NaCl, pH 7.4 at 37°C for 30 min.

>>More Related Information: (P41)

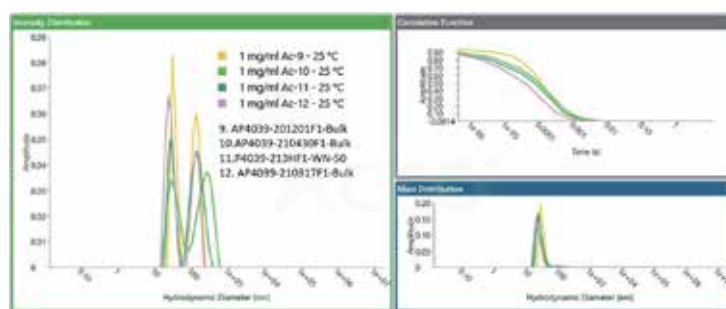
SEC-MALS & UNcle Quality Characterization Analytical Service

Our platform enables the analysis of melting temperature (T_m) and aggregation temperature (T_{agg}), particle size, molecular weight, degree of polymerization, and purity. Both instruments have low sample consumption, high sample throughputs, and are label-free testing methods. With our available technologies, our platform meets the testing needs of the entire drug research and development, process and process development, product quality control and others.

Featured Data



Determination of Molecular Weight of Three Antibody Drugs by SEC-MALS



Determination of particle size of S protein by UNcle.

>>More Related Information: (P43)

■ Safety Evaluation: Residue Detection

Residue detection is an essential component of safety evaluation in antibody drug quality control. Analytical techniques are used to identify and quantify potential residues, impurities, or contaminants in the drug formulation. By adhering to regulatory guidelines and standards, residue detection helps ensure the safety and quality of antibody drugs.

Residual Host Cell DNA / RNA Detection Kits

Residue Detection Assays

•resDNA Detection Kits

•DNase / RNase Activity Detection Kits

•Nuclease Detection Kits

...

With standardized protocols and validated performance, our Host Cell DNA / RNA Detection kits offer a convenient and robust solution for assessing the presence of residual genetic material in antibody drug formulations. These kits help ensure compliance with both WHO and FDA industry guidance and contribute to the overall safety and quality of antibody drugs.

Featured Product

resDNA Detection Kits



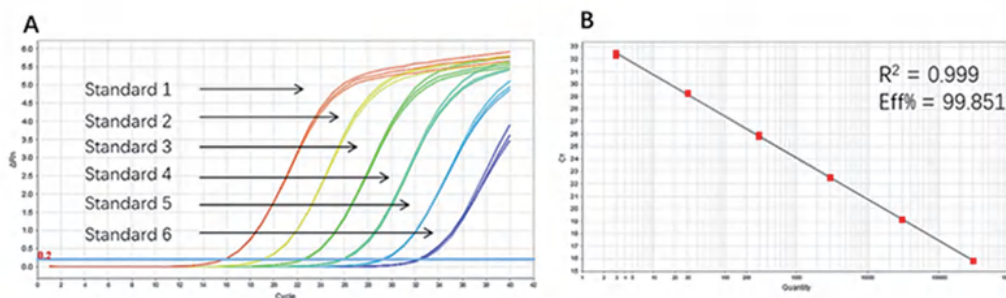
Cat. No.	Product Description
OPA-O002	<i>E.coli</i> resDNA Quantitative Kit (qPCR)
OPA-R004	CHO resDNA Quantitation Kit (qPCR)
OPA-R006	HEK293 resDNA Quantitation Kit (qPCR)
OPA-R010	HEK293T resDNA Quantitation Kit (qPCR)
OPA-R008	E1A resDNA Quantitation Kit (qPCR)
OPA-R007	E1A & SV40LTA resDNA Quantitation Kit (qPCR)
OPA-R009	Plasmid resDNA Quantitation Kit (qPCR)
OPA-R005	resDNA Sample Preparation Kit (Magnetic Beads)

DNase / RNase Activity Detection Kits



Cat. No.	Product Description
ASE-A001	RNase Activity Assay Kit (Fluorescence)
ASE-A002	DNase Activity Assay Kit (Fluorescence)

Featured Data



High sensitivity and broad dynamic range using the *E. coli* resDNA Quantitative Kit (qPCR) (Cat. No. OPA-O002). (A) Typical analysis results are obtained with Standard 1 (300 pg/μL) to 6 (3 fg/μL). (B) The standard curve of the 10-fold dilution series. PCR efficiency should be 90%-110%.



Scan the QR code for more product information

Nuclease Residue Detection Kits

We offer Nuclease Detection Kits specifically designed for safety evaluation during antibody drug quality control. These kits enable the sensitive and accurate detection of nucleases, which are enzymes that can degrade nucleic acids, such as DNA and RNA. By incorporating these kits into your quality control processes, you can enhance the safety and quality of your antibody drug products.

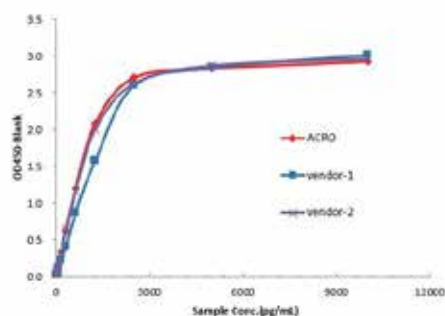
Featured Product

Nuclease Detection Kits



Cat. No.	Product Description
CRS-A016	GENIUS™ Nuclease ELISA Kit

Featured Data

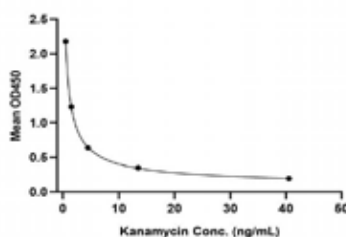


GENIUS™ Nuclease ELISA Kit (Residue Testing) (Cat. No. CRS-A016) can detect the nuclease from different manufacturers with similar sensitivity.

Residual Antibiotics Detection Kits

Residual antibiotics can be introduced during the manufacturing process and may pose potential risks to patients, such as allergic reactions or antibiotic resistance. Our Residual Antibiotics Detection Kits are designed for safety evaluation during antibody drug quality control. These kits accurately detect and quantify residual antibiotics in the drug formulation. By using our kits, you can ensure compliance with safety standards, identify potential risks to patient safety, and maintain the quality of the antibody drug.

Featured Data



For each experiment, a standard curve needs to be set for each micro-plate, and the specific OD value may vary depending on different laboratories, testers, or equipments. The following example data is for reference only.

Preclinical Studies

In preclinical drug development, accurate and reliable results are crucial to minimize clinical research risks. Animal experiments play a key role, considering factors such as drug MOA, target affinity, sequence and protein level consistency, and cellular considerations. The Specificity and affinity of antibodies to different targets are also important considerations.

■ Preclinical Model Selection

Preclinical animal models are used to assess the safety and efficacy of the antibody before moving to human clinical trials. When selecting a preclinical animal model for antibody drug development, consider the model's relevance to the human disease, genetic similarity to humans, immunological compatibility, scalability, regulatory acceptance, and ethical considerations. These factors help ensure that the model replicates the disease, predicts the antibody's response, and meets regulatory requirements.

Multiple Species Target Proteins

Our multiple species target protein solutions, are tailored for precise and comprehensive activity and *in vitro* functional evaluations using ELISA, SPR, BLI, and more. Our premium-quality products with exceptional sensitivity, specificity, and reproducibility, our target protein portfolio offers unrivaled versatility, enabling you to unravel the mysteries of cellular interactions and gain deeper insights into disease mechanisms.

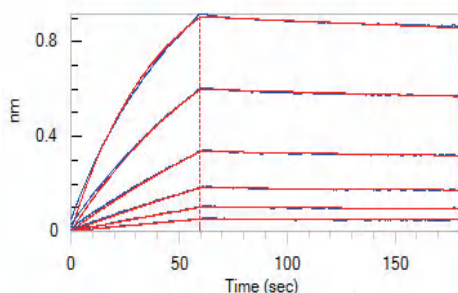
Featured Product

FLAG Transmembrane Proteins

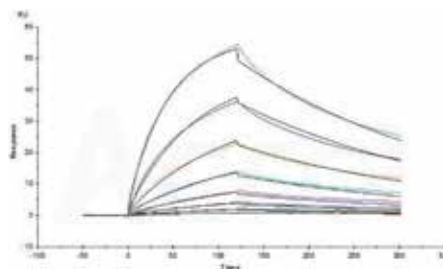
Cytokine Target Proteins

CD3 Proteins

Featured Data



Loaded Human IL-2 Protein, Fc Tag (Cat. No. **IL2-H5269**) on Protein A Biosensor, can bind Cynomolgus IL-2RB&IL-2RA&IL-2RG Protein, His Tag & Twin-Strep Tag (Cat. No. **ILG-C52W3**) with an affinity constant of 0.907 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).



Bispecific T-cell Engager (CD3XBCMA) immobilized on CM5 Chip can bind Biotinylated Cynomolgus CD3E&CD3D Heterodimer Protein, His, Avi tag & Tag Free (Cat. No. **CDD-C82W6**) with an affinity constant of 53.5 nM as determined in a SPR assay (Biacore T200) (Routinely tested).

>>More Related Information: (P03)

BIOSYSTEMS
Acro[®] Aneuro

Pre-formed Fibrils (PFFs)

A Novel Approach to Modeling Neurodegeneration

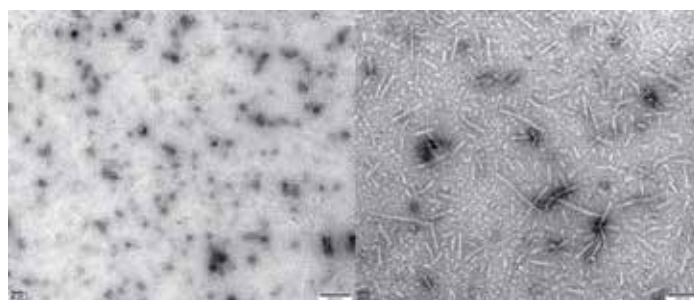
Tau-441 PFFs • Alpha-synuclein PFFs • Amyloid beta PFFs • TDP-43 PFFs • SOD-1 PFFs

PFFs-based disease models offer improved drug evaluation by recapitulating disease pathology, providing reproducible experimental conditions, targeting disease-specific pathways, assessing drug effects on aggregation kinetics and cellular toxicity, and facilitating high-throughput screening.

Product List

Molecule	Cat. No.	Product Description	Monomer Source	Expression System
Tau	TAU-H5115	Human Tau-441/2N4R Pre-formed Fibrils Protein, Tag Free	TAU-H5117	<i>E.coli</i>
	TAU-H5146	Human Tau-441 K18 Pre-formed Fibrils Protein, His Tag (ThT active)	NA	<i>E.coli</i>
Alpha-Synuclein	ALN-H51H4	Human Alpha-Synuclein Pre-formed Fibrils Protein, His Tag (ThT active)	ALN-H52H8	<i>E.coli</i>
	ALN-H5115	Human Alpha-Synuclein Pre-formed Fibrils Protein, Tag Free	ALN-H5214	<i>E.coli</i>

Featured Data

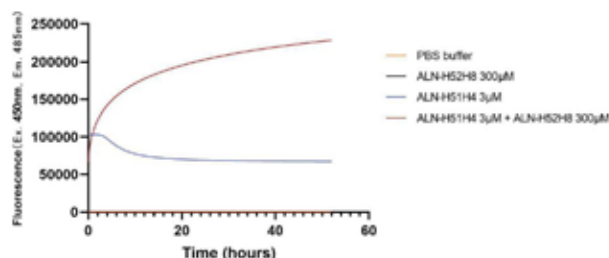


TEM of Human Tau-441/2N4R Pre-formed Fibrils Protein (Cat. No. **TAU-H5115**).



HEK293/Human Tau (GFP) Stable Cell Line (Cat. No. **CHEK-ATP087**) were transduced with Human Tau-441 K18 Pre-formed Fibrils Protein, His Tag (Cat. No. **TAU-H5146**) and Human Tau-441 K18 Protein, His Tag respectively. The fluorescence of GFP-Tau (Green) was detected bA. Lipo2000 transduction. B. Lipo2000 and Human Tau-441 K18 Protein, His Tag transduction.

Thioflavin T Seeding Assay



Thioflavin T is a sensitive fluorescence reporter of fibrils formulation that binds to beta sheet-rich structures. The alpha synuclein pre-formed fibrils (Cat. No. **ALN-H51H4**) is able to induce the aggregation of alpha synuclein monomers (Cat. No. **ALN-H52H8**) (QC tested).

SPR/BLI Analysis Services

Affinity testing provides valuable information for selecting preclinical animal models. It helps determine the appropriate target species, evaluate the conservation of Fc receptors, and provide a basis for drug dose selection. This information can guide the selection of preclinical animal models to better predict the efficacy and safety of antibody drugs in humans.

Platforms

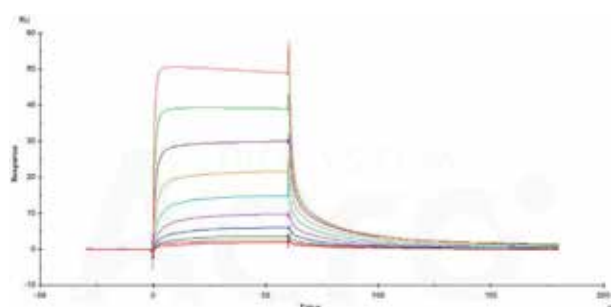
★ Surface Plasmon Resonance (SPR) service



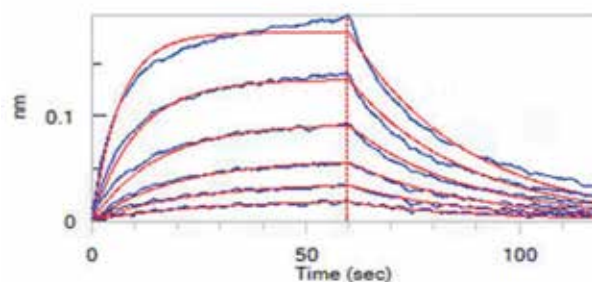
★ Biolayer Interferometry (BLI) service



Case Sharing



Immobilized Cynomolgus / Rhesus macaque FcRn Protein (Cat. No. **FCM-C5284**) on CM5 Chip via anti-His antibody, can bind Herc*ptin with an affinity constant of 0.403 μ M as determined in a SPR assay (Biacore T200).



Loaded Herceptin on Protein A Biosensor, can bind Mouse CD64, His Tag (Cat. No. **CD4-M5227**) with an affinity constant of 31 nM as determined in BLI assay (ForteBio Octet Red96e).

>>More Related Information: (P18)

■ Efficacy Evaluation: Pharmacodynamic Studies

It is important to design pharmacodynamic studies in preclinical models that closely resemble the intended clinical use of the drug. By assessing the drug's effects on relevant biomarkers, imaging, functional assays, or disease models, researchers can gain insights into the drug's efficacy and optimize its development before advancing into human clinical trials.

Cytokines for Cell Culture (Premium Grade)

Cytokines play a crucial role in cell culture-based pharmacodynamic studies of antibody drugs. They are signaling molecules that regulate various cellular processes, including immune responses, inflammation, cell proliferation, and differentiation. In the context of antibody drug studies, cytokines are often used to simulate specific immune responses or inflammatory conditions to assess the drug's effects.

Featured Product

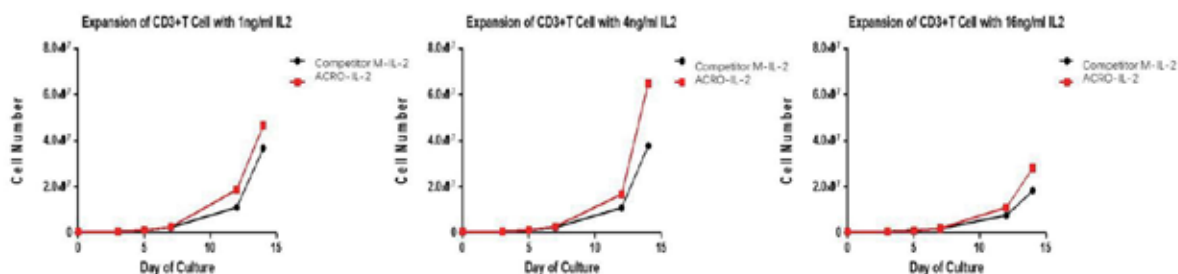
Immune cell culture cytokines

Stem cell culture cytokines

Organoids culture cytokines

Neural cell culture cytokines

Featured Data



ACROs Human IL-2, premium grade (Cat. No. IL2-H5215) has higher bioactivity than that of other competitors when activates T cell with CD3/CD28 magnetic beads at different concentrations.

>>More Related Information: (P27)

T cell Activation/Expansion Reagents

T cell activation and expansion reagents are essential tools for cell-based antibody drug pharmacodynamic studies, especially when investigating the immune response and evaluating the effects of antibody drugs on T cells. These reagents help stimulate and expand T cells *in vitro*, allowing for the study of T cell activation, proliferation, cytokine production, and other functional responses.

Featured Product

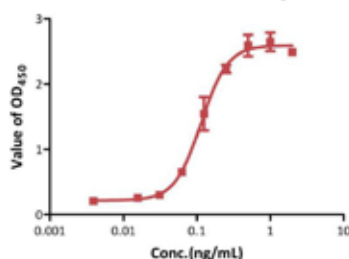
Cell Activation: OKT3 Antibody, CD3/CD28 Activation Beads

Cell Culture: Ultralow Endotoxin Cytokines, RUO, Premium and GMP-grades

Residue analysis: Cytokine ELISA Kit, Anti-CD3/CD28 Antibody Kit

Featured Data

GMP Monoclonal Anti-Human CD3 Antibody (OKT3)
stimulates secretion of IL-2 by PBMC



GMP Monoclonal Anti-Human CD3 Antibody (OKT3) (Cat. No. **GMP-MC0323**) stimulates secretion of IL-2 by PBMC stimulated with 10 ng/mL Monoclonal Anti-Human CD28 Antibody, Mouse IgG1. The typical EC50 for this effect is 0.11 ng/mL.

>>More Related Information: (P30)

Cytokine Detection ELISA Kits

Cytokine detection kits are widely used in pharmacodynamic studies to quantify cytokine levels in biological samples. Our Cytokine Detection ELISA kit can contribute to the success of your pharmacodynamic study by providing reliable and accurate quantification of cytokines.

Featured Product

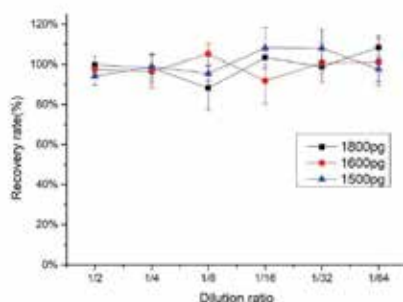
Human Soluble Delta Like Protein 4 (DLL4) ELISA Kit

Human Erythropoietin (EPO) ELISA Kit

Human IFN-γ ELISA Kit

Human IL-8 ELISA Kit

Featured Data



Three human serum samples with high concentrations of IFN-γ were diluted 1:2, 1:4, 1:8, 1:16, 1:32, 1:64 with Dilution Buffer to produce samples with values within the dynamic range and then assayed. On average, 99.58% of IFN-γ was detected from serum samples.

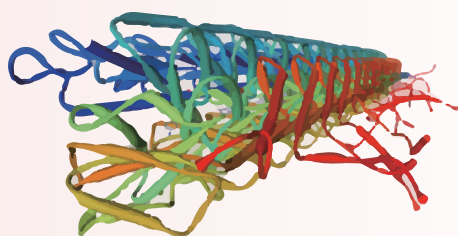
>>More Related Information: (P30)

Pre-formed Fibrils (Aneuro)

PFFs-based disease models offer improved drug evaluation by recapitulating disease pathology, providing reproducible experimental conditions, targeting disease-specific pathways, assessing drug effects on aggregation kinetics and cellular toxicity, and facilitating high-throughput screening.

Featured Product

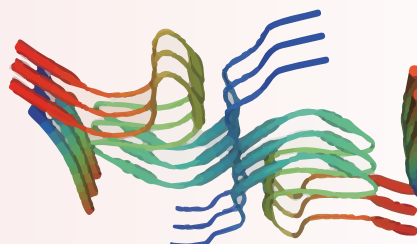
Tau PFFs



TAU-H5115

TAU-H5146

Alpha-Synuclein PFFs



ALN-H51H4

ALN-H5115

>>More Related Information: (P68)

Diagnostic Biochips

Electrophysiological techniques allow for the direct measurement of electrical signals in cells or tissues, providing insights into the functional changes induced by antibody drugs. We can assist with experimental design, equipment selection, proper electrode placement, data acquisition and analysis, troubleshooting technical issues, and providing insights into the interpretation of electrophysiological recordings.

				
Silicon Probes		Janus Double-sided	Deep Array	Micro ECoG
Channels	16, 32, 64, 128	328	32, 64, 128	64, 128
Length	Up to 12 mm	Up to 12 mm	Up to 90 mm	N/A
Intended Targets	Small animals, cortex in NHP and other large animals	Small animals and cortex of NHP and large animals	Deep structures in NHP and other large animals	Cortical surface
Substrate Material	Single crystal silicon	Single crystal silicon	Sharpened stainless steel or tungsten wire	Flexible polymer
Site Material	Electroplated pedot	Electroplated pedot	Electroplated pedot	Electroplated pedot
Available Options	Optical fiber attach, EEG lead (2 for 64 channel, 4 for 128 channel), accelerometer	N/A	Optical fiber attach, EEG lead (2 for 64 channel, 4 for 128 channel)	N/A



Scan the QR code for more product information

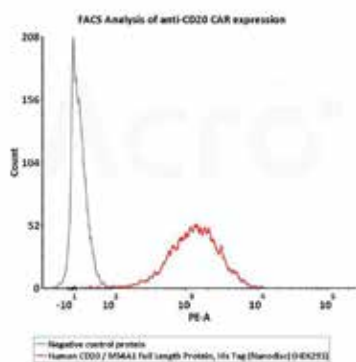
■ Efficacy Evaluation: Pharmacokinetic Studies

Pharmacokinetic studies in preclinical efficacy evaluation involve assessing how a drug is absorbed, distributed, metabolized, and eliminated in animal models. Key considerations include study design, sample collection, analytical method development, calculation of pharmacokinetic parameters, data analysis, interpretation in relation to efficacy, integration with efficacy and safety data, and adherence to regulatory guidelines.

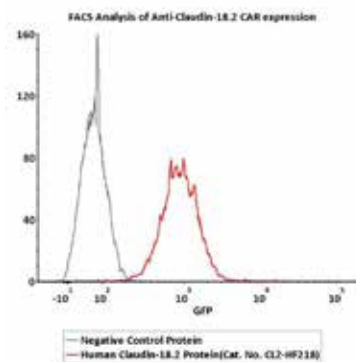
Target Proteins

The significance of target protein in pharmacological evaluation lies in its role as a key determinant of drug efficacy. Understanding the interaction between drugs and target proteins helps assess the potential therapeutic effects and optimize drug design for improved clinical outcomes. We offer a wide range of target proteins that undergo strict quality control, meeting your research needs.

Featured Data



2e5 of CD20-CAR-293 cells transfected with anti-CD20-scFv were stained with 100 μ L of 3 μ g/mL of Human CD20 / MS4A1 Full Length Protein, His Tag (Nanodisc) (HEK293) (Cat. No. **CD0-H52H1**) and negative control protein respectively, washed and then followed by PE anti-His antibody and analyzed with FACS (QC tested).



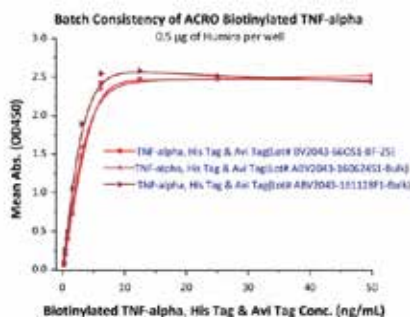
2e5 of Anti-Claudin-18.2 CAR-293 cells were stained with 100 μ L of 3 μ g/mL of Fluorescent Human Claudin-18.2 Full Length Protein-VLP (Cat. No. **CL2-HF218**) and negative control protein respectively, FITC signals were used to evaluate the binding activity (Routinely tested).

>>More Related Information: (P03)

Biotinylated Target Proteins

By using biotinylated target proteins in immunoassays such as ELISA or Western blotting, you can accurately quantify the concentration of an antibody drug in biological samples over time. We use high-quality recombinant proteins as starting materials to closely mimic natural conformation and modification. Thorough optimization is performed to maximize bioactivity and detection sensitivity, as well as stringent quality control minimizes batch-to-batch variations.

Featured Data



10 In the above ELISA analysis, three different lots of biotinylated hTNF-alpha (Cat. No. **TNA-H82E3**) were used to detect immobilized Adalim* mab (0.5 µg/ml). The result showed that the batch variation among the tested samples is negligible.

>>More Related Information: (P07)

ELISA Assay Kits for Quantitative Analysis

We offer a series of ELISA assay kits for quantifying the blood drug concentrations of antibodies in preclinical and clinical blood samples. These kits have been proven to exhibit excellent experimental performance, including low background, universal rapidity, and high inter-batch consistency.

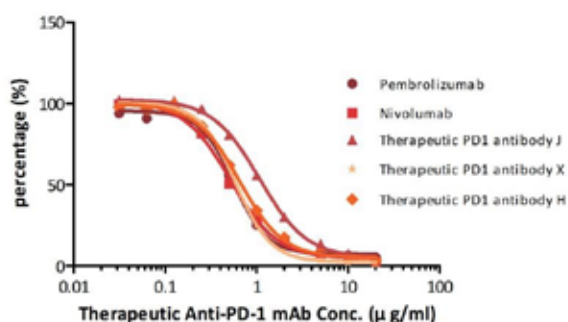
Featured Product

ELISA Assay Kit for Anti-PD-1 h-mAb in Human/Mouse/Monkey Serum

ELISA Assay Kit for Anti-HER-2 h-mAb in Human/Mouse/Monkey Serum

ELISA Assay Kit for Anti-CTLA-4 h-mAb in Human/Mouse/Monkey Serum

Featured Data



Quantitative Analysis Five Different Therapeutic Anti-PD-1 Antibody in Mouse Serum Samples.

>>More Related Information: (P30)

ComboX: Streptavidin Series Products

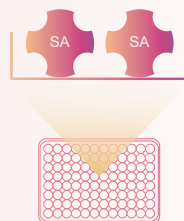
Boost pharmacokinetic studies with our extensive range of streptavidin products. Empower researchers with high-quality streptavidin reagents to expedite their quest for novel therapeutics. Trust our reliable solutions to accelerate advancements in preclinical studies and revolutionize the drug development process.

Featured Product

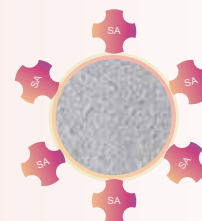
SA Proteins



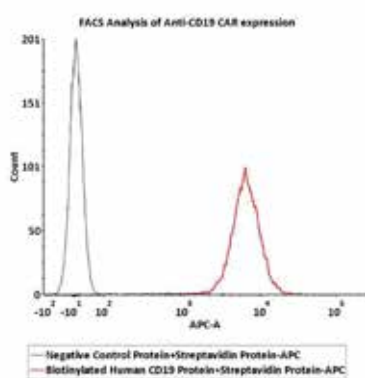
SA Coated Plates



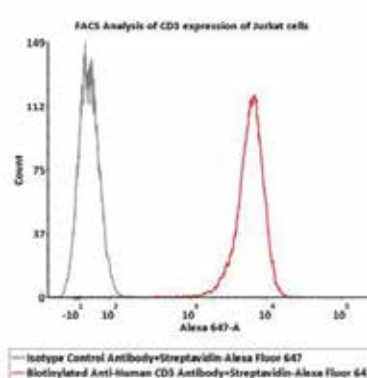
SA Magnetic Beads



Featured Data



5e5 of Anti-CD19 CAR-293 cells were stained with 100 μ L of 20 μ g/mL Biotinylated Human CD19 (20-291) Protein, Fc, Avi tag, premium grade (Cat. No. **CD9-H82F6**) and negative control protein respectively, washed and then followed with 2.5 μ g/mL of Streptavidin Protein-APC (Cat. No. **STN-NA113**) and analyzed with FACS. APC signal was used to evaluate the binding activity (QC tested).



5e5 of Jurkat cells were stained with 100 μ L of 3 μ g/mL of Biotinylated Anti-Human CD3 Antibody, Mouse IgG2a, Avi tag (Clone: OKT3), premium grade (Cat. No. **CDE-M525a**) and isotype control antibody respectively, washed and then followed with 100 μ L of 1 μ g/mL of Streptavidin Protein-Alexa Fluor 647 (Cat. No. **STN-NA119**) and analyzed with FACS. Alexa 647 signal was used to evaluate the binding activity (Routinely tested).

>>More Related Information: (P13)

ComboX: Universal Antibodies

Smoothly pharmacokinetic studies with our universal antibodies. Streamline your research process and achieve seamless antibody discovery with our exceptional solutions. Empower your team to efficiently identify and select the right antibodies for your research needs. Trust us to be your partner in successful preclinical studies.

Featured Product

Anti-His Antibody

Anti-Human IgG Antibody

Anti-MMAE Antibody

>>More Related Information: (P14)

ComboX: Isotype Control

Enhance pharmacokinetic studies with our comprehensive range of isotype control products. Eliminate non-specific effects and empower drug developers in their quest for reliable antibody selection. Trust our solutions to streamline research and accelerate the preclinical studies process.

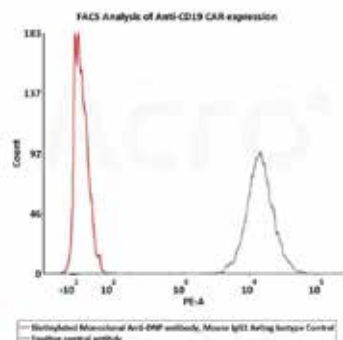
Featured Product

IgG Isotype Controls

IgG Fc Proteins

Serum Albumin

Featured Data



2e5 of anti-CD19 CAR-293 cells were stained with 100 μ L of 1:50 dilution (2 μ L stock solution in 100 μ L FACS buffer) Biotinylated Mouse IgG1 kappa Isotype Control (Cat. No. **DNP-BM190**) and positive control antibody (Cat. No. **FM3-BY54**) respectively, washed and then followed by PE-SA and analyzed with FACS (QC tested).

>>More Related Information: (P15)

Anti-idiotypic Antibodies

We have developed a series of anti-idiotypic antibodies with high affinity and specificity for immunogenicity analysis and pharmacokinetics studies. These antibodies are specifically designed to target and detect the idiotype region of antibodies, allowing for precise characterization of immune responses and evaluation of drug pharmacokinetics.

Featured Product

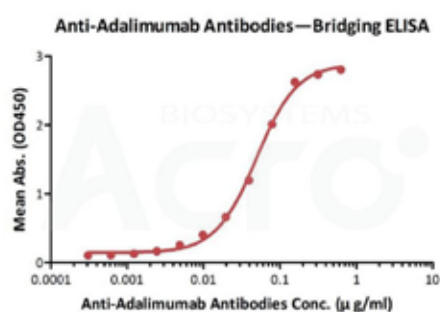
Anti-Adalimumab Antibodies (AY19)

Anti-Bevacizumab Antibodies (AY12)

Anti-Cetuximab Antibodies (AY27)

Anti-Rituximab Antibodies (AY37), etc.

Featured Data



Anti-Adalimumab Antibodies bridging ELISA for Anti-Drug Antibody (ADA) assay development. Immobilized adalimumab at 1 μ g/mL, add increasing concentrations of Anti-Adalimumab Antibody (AY19) (Cat. No. **ADB-Y19**, 10% human serum) and then add biotinylated adalimumab at 5 μ g/mL. Detection was performed using HRP-conjugated streptavidin with a sensitivity of 0.6 ng/mL.

>>More Related Information: (P42)

PK Method Development, Validation and Transfer, Kit Development Services

To cater to the specific requirements of your research, we provide a one-stop service, starting from antigen preparation to the development of monoclonal or polyclonal anti-idiotype antibodies (ADA), as well as pharmacokinetic (PK) and immunogenicity test kits. We ensure that our PK/ADA test kits are delivered with sensitivity that meets regulatory requirements.

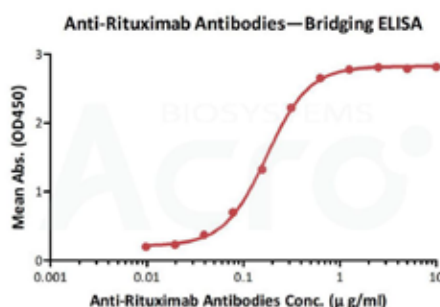
Featured Service

Monoclonal anti-idiotypic antibodies preparation service

Polyclonal anti-idiotypic antibody preparation service

Development of blood drug concentration/immunogenicity detection kit

Featured Data



Anti-Rituximab Antibodies bridging ELISA for Anti-Drug Antibody (ADA) assay development. Immobilized rituximab at 1 μg/ml, added increasing concentrations of Anti-Adalimumab Antibodies (Cat. No. RIB-Y36, 10% human serum) and then added biotinylated rituximab at 2 μg/ml. Detection was performed using HRP-conjugated streptavidin with a sensitivity of 9.7 ng/mL.

>>More Related Information: (P46)

■ Safety Evaluation: Toxicity Studies

By conducting comprehensive toxicity studies during preclinical development, potential safety concerns and adverse effects of the antibody drug can be identified early on. These studies provide critical data to support decision-making, dose selection, and risk assessment before advancing the drug candidate to clinical trials, ensuring patient safety and regulatory compliance.

Cytokines for Cell Culture (Premium Grade)

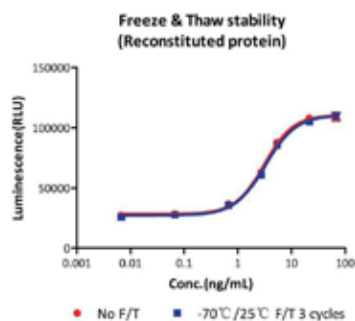
The key activities of toxicity studies in cell-based assays include selecting appropriate cells, assessing dose-response relationships, measuring cell viability and cytotoxicity, detecting apoptosis and necrosis, evaluating oxidative stress, assessing genotoxicity, investigating mechanisms of toxicity, and adhering to regulatory guidelines. We provide highly active and consistent cytokines for *in vitro* culture of various cell types.

Featured Product

GMP Grade Cytokines

Premium Grade Cytokines

Featured Data



Human IL-7 Protein premium grade (IL7-H4219) designed for preclinical stage, has the same activity and performance with GMP Grade IL-7 (GMP-L07H24), which enables a seamless transition from preclinical development to clinical phases.

>>More Related Information: (P27)

Cytokines for Organoid Culture

Organoids have emerged as valuable models for studying various aspects of human biology, including drug development and pharmacokinetics. We have developed a series of high-quality cytokines specifically designed to support organoid cell culturing. These cytokines serve as essential growth factors that have been thoroughly validated to promote the growth and development of organoids. By providing these reliable and effective cytokines, we aim to facilitate the successful culture and expansion of organoids for various research and drug development applications.

Featured Product

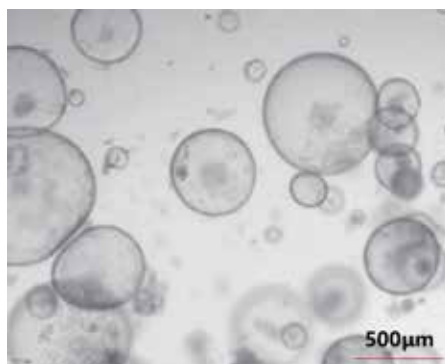
EGF

Noggin

R-spondin 1

Wnt-3a, etc.

Featured Data



Human EGF (Cat. No. **EGF-H52H3**), Noggin (Cat. No. **NON-H5257**), R-spondin1 (Cat. No. **RS6-H4220**), FGF10 (Cat. No. **FG0-H5145**) actively support gastric organoid growth during multiple passages and long-term culture processes.

Mogengel Matrix Basement Membrane Extracts

Basement membranes form continuous sheets of a specialized extracellular matrix that are an essential part in the organization of tissues forming the scaffolding and support for cellular growth and cell layers. They also affect a variety of cellular mechanisms such as adhesion, migration, proliferation, and differentiation.

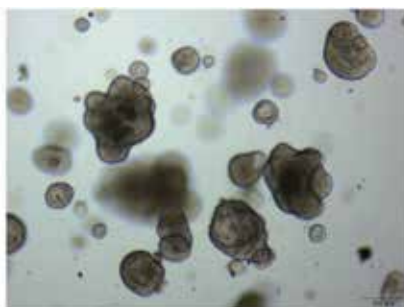
Featured Product

Mogengel Matrix (Standard)	Mogengel Matrix GFR (Growth Factor Reduced)
MogengelMatrix HC (High Concentration)	Mogengel Matrix iPSC Level (Stem Cell)
Mogengel Matrix Organoid Culture (Organoid)	...

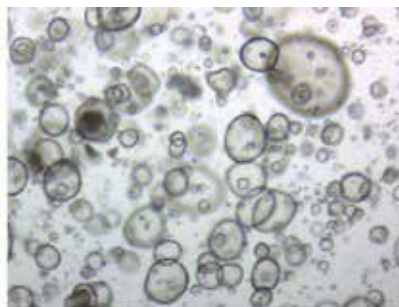
Featured Data

★ Organoid Culturing

AC-M082755



Colorectal Cancer Organoid (Day4)



Gastric Cancer Organoid (Day5)

Human tumor organoids (colorectal cancer organoids, gastric cancer organoids) can grow well in greater than 70% Mogengel (Cat. No. AC-M082755).

>>More Related Information: (P28)

■ Safety Evaluation: Immunogenicity Studies

Immunogenicity studies play a significant role in the development of antibody drugs for safety assessment. It helps evaluate the risk of immune reactions caused by antibody drugs in the human body. By detecting and assessing the levels of anti-drug antibodies (ADAs) produced in patients, it determines whether the antibody drug can trigger an immune response and evaluates the severity and duration of the immune reaction. This research is crucial for ensuring the safety and efficacy of antibody drugs.

Target Proteins

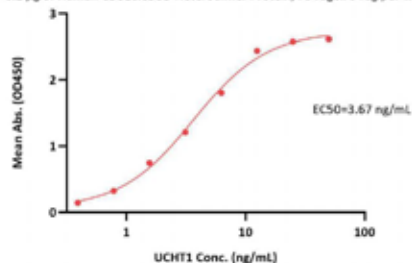
The significance of target protein in clinical safety assessment of drugs lies in its ability to provide crucial information about potential adverse effects and toxicity. Evaluating the interaction between drugs and target proteins helps identify potential safety concerns, guiding the development of safer and more effective therapeutic intervention. We offer a wide range of target proteins that undergo strict quality control, meeting your research needs.

Featured Product

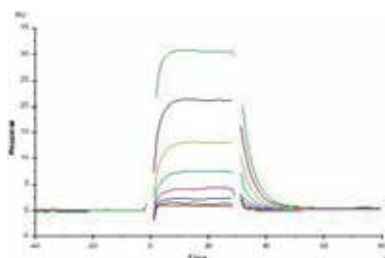
FLAG Transmembrane Proteins	Cytokine Target Proteins	CD3 Proteins
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Featured Data

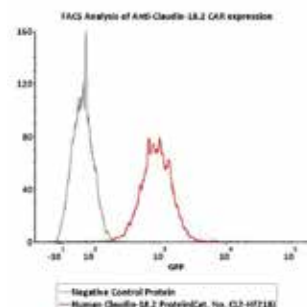
Human CD3E&CD3D Heterodimer Protein, Fc Tag&Fc Tag ELISA
0.1 µg of Human CD3E&CD3D Heterodimer Protein, Fc Tag&Fc Tag per well



Immobilized Human CD3E&CD3D Heterodimer Protein, Fc Tag & Fc Tag (Cat. No. **CDD-H5255**) at 1 µg/mL (100 µL/well) can bind UCHT1 with a linear range of 0.8-6 ng/mL (Routinely tested).



Human IL-2 R beta, His Tag (SPR verified) (Cat. No. **CD2-H5221**) captured on CM5 chip via anti-His antibody, can bind Human IL-2, Tag Free (Cat. No. **IL2-H4113**) with an affinity constant of 0.525 µM as determined in a SPR assay (Biacore T200).



2e5 of Anti-Claudin-18.2 CAR-293 cells were stained with 100 µL of 3 µg/mL of Fluorescent Human Claudin-18.2 Full Length Protein-VLP (Cat. No. **CL2-HF218**) and negative control protein respectively, FITC signals were used to evaluate the binding activity (Routinely tested).

>>More Related Information: (P03)

Biotinylated Target Proteins

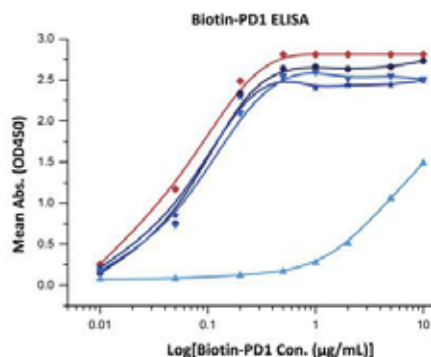
The interaction between biotin and avidin/streptavidin is incredibly strong and specific, making it an excellent tool in protein biochemistry. We develop an exclusive collection of pre-labeled and experimentally validated biotinylated recombinant proteins named the Mabsol® which includes more than a hundred commonly studied drug targets and biomarker proteins. Mabsol® includes two unique and complimentary product series, the precision Avi series built upon the Avitag™ technology, and the series produced using the in-house developed chemical labeling method.

Featured Product

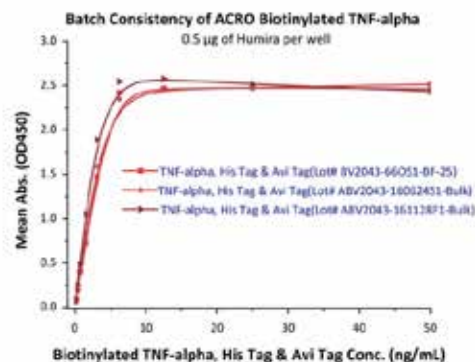
Precision Avi Series Biotinylated Target Proteins

UltraLys Series Biotinylated Target Proteins

Featured Data



Binding activity of different forms of biotinylated PD1 evaluated in a functional ELISA against rhPD-L1 (Cat. No. **PD1-H5258**).



In the above ELISA analysis, three different lots of biotinylated hTNF-alpha (Cat. No. **TNA-H82E3**) were used to detect immobilized Adalim[®]mab (0.5 µg/mL). The result showed that the batch variation among the tested samples is negligible.

>>More Related Information: (P07)

ComboX: Universal Antibodies

Our universal antibodies can help identify and evaluate potential off-target effects and cross-reactivity of drugs, providing valuable insights into their safety profiles. This information aids in optimizing drug design and minimizing adverse reactions, ensuring the development of safer and more reliable pharmaceutical interventions.

Featured Product

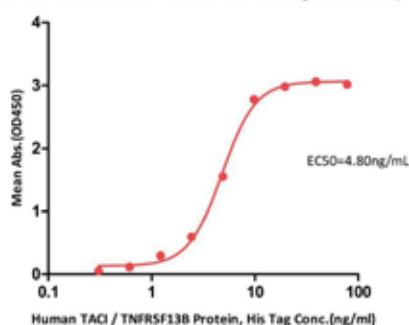
Anti-His Antibody

Anti-Human IgG Antibody

Anti-MMAE Antibody

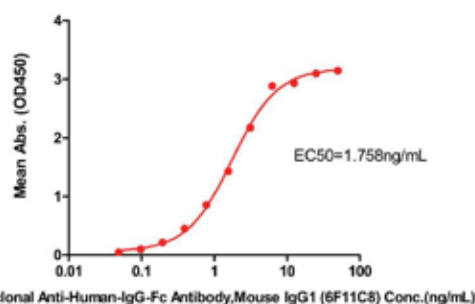
Featured Data

HRP conjugated Anti-His tag Antibody (AY63), mAb ELISA
0.2µg of Human BAFF / TNFSF13B / CD257 Protein, Fc Tag, active trimer per well



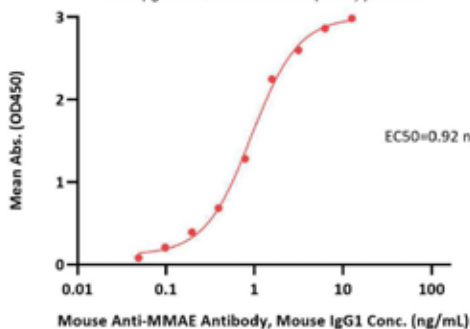
Immobilized Human BAFF Protein, Fc Tag (Cat. No. **BAF-H5261**) at 2 µg/mL (100 µL/well) can bind Human TACI Protein, His Tag (Cat. No. **TAI-H52H3**) when detected by HRP conjugated Anti-His tag Antibody (AY63), mAb (Cat. No. **HIS-LY63**) dilute at 1:5000 (0.108 µg/mL) (QC tested).

Monoclonal Anti-Human-IgG-Fc Antibody, Mouse IgG1 (6F11C8) ELISA
0.2µg of Human ACE2 Protein, Fc Tag per well



Immobilized Human ACE2 Protein, Fc Tag (Cat. No. **AC2-H5257**) at 2 µg/mL (100 µL/well) can bind Monoclonal Anti-Human-IgG-Fc Antibody, Mouse IgG1 (6F11C8) (HPLC verified) (Cat. No. **IGG-AY69**) with a linear range of 0.10-3.13 ng/mL (QC tested).

Mouse Anti-MMAE Antibody, Mouse IgG1 ELISA
0.02 µg of Disitamab Vedotin (RC48) per well



Immobilized Disitamab Vedotin (RC48) at 0.2 µg/mL (100 µL/well) can bind Mouse Anti-MMAE&MMAF Antibody, Mouse IgG1 (Cat. No. **MME-M5252**) with a linear range of 0.1-2 ng/mL (QC tested).

>>More Related Information: (P14)

ComboX: Isotype Control

Isotype controls serve as important tools for evaluating the immune response induced by antibody drugs. They help distinguish specific immune reactions caused by the drug from non-specific background signals. By comparing the immune response generated by the antibody drug with that of the appropriate isotype control, researchers can better understand the potential of the drug and assess its safety and efficacy.

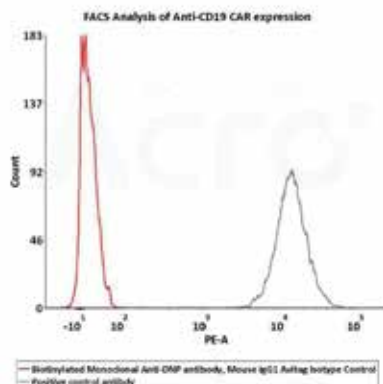
Featured Product

IgG Isotype Controls

IgG Fc Proteins

Serum Albumin

Featured Data



2e5 of anti-CD19 CAR-293 cells were stained with 100 μ L of 1:50 dilution (2 μ L stock solution in 100 μ L FACS buffer) Biotinylated Mouse IgG1 kappa Isotype Control (Cat. No. **DNP-BM190**) and positive control antibody (Cat. No. **FM3-BY54**) respectively, washed and then followed by PE-SA and analyzed with FACS (QC tested).

>>More Related Information: (P15)

Anti-idiotype Antibodies

It is the unique set of antigenic determinants (epitopes) of variable portion of antibody. Anti-idiotypic antibody binds to the of another antibody, usually an antibody drug, which makes it very powerful tool for antibody drug development, especially for immunogenicity and PK/PD analysis. To support preclinical/clinical immunogenicity and PK analysis, we have developed a series of high-affinity anti-idiotypic antibodies with free protocol and our pipeline covers five targets including Adalimumab, Rituximab, Cetuximab, Rituximab, and Bevacizumab.

Featured Product

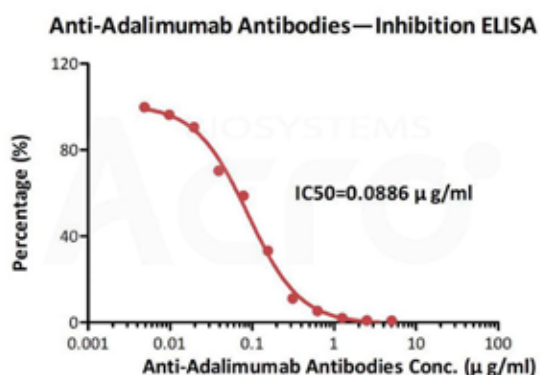
Anti-Adalimumab Antibodies

Anti-Bevacizumab Antibodies

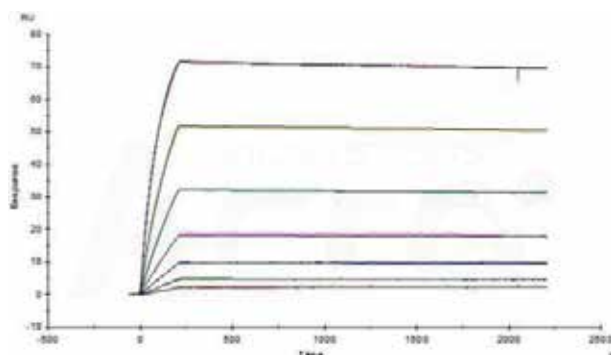
Anti-Cetuximab Antibodies

Anti-Rituximab Antibodies

Featured Data



Measured by its neutralizing ability in a functional ELISA. Immobilized adalimumab at 0.5 μ g/mL (100 μ L/well) can bind Anti-Adalimumab Antibody (AY19) (Cat. No. **ADB-Y19**) and Biotinylated Human, His,Avitag (Cat. No. **TNA-H82E3**) with an inhibition rate of 100%.



Anti-Cetuximab Antibody (AY27) (mouse IgG1, Cat. No. **CEB-Y27**) captured on CM5 chip via anti-mouse antibodies surface, can bind Human with an affinity constant of 7.28.

>>More Related Information: (P42)

Anti-idiotypic Antibody Development Services, Immunogenic Reagents, and Kit Development Services

Anti-idiotypic antibodies are antibodies that target the variable region of another antibody to produce specific binding. These antibodies are widely used in drug development: they can be used as an important reference standard for immunogenicity analysis or can be developed to specifically detect antibody drug levels for pharmacokinetic studies.

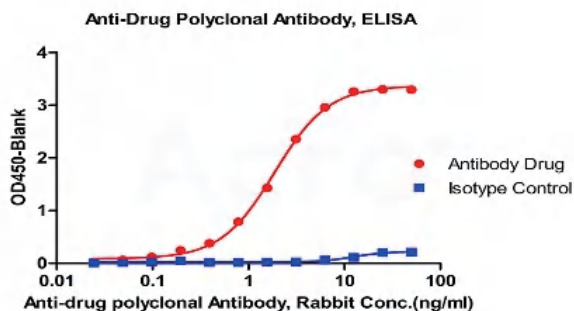
Featured Service

Monoclonal anti-idiotypic antibodies preparation service

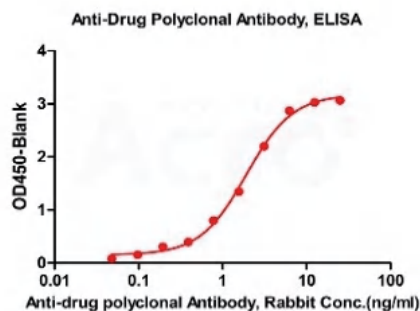
Polyclonal anti-idiotypic antibody preparation service

Development of blood drug concentration/immunogenicity detection kit

Featured Data



New Zealand white rabbits were immunized with full-length monoclonal antibodies. The antiserum was affinity purified for polyclonal antibodies specific to the drug. Cross reactivity to subtype control was less than 2%.



New Zealand white rabbits were immunized with conjugates. Antiserum was purified by affinity chromatography until antibody was more than 1:712,000.

>>More Related Information: (P46)

■ Efficacy & Safety Evaluation: Companion Diagnostics

Immunohistochemistry is a technique for locating, qualitatively and quantitatively studying antigens in tissue cells based on the specific binding of antigens and antibodies and the reaction of enzyme-labeled antibodies with substrate solutions. In companion diagnostic applications, both immunohistochemical antibodies and kits can be used to evaluate drug efficacy and safety to obtain the best judgment of drug treatment.

Immunohistochemical (IHC) Antibodies

(IHC) is an antibody-based technology, using the principle of specific binding of antigen and antibody, through the reaction of enzyme labeled antibody and substrate solution, so as to conduct the localization, qualitative and quantitative research of antigen in tissue cells. This new technique has been widely used in its strong specificity, high sensitivity and accurate localization, and in many fields of biological and medical research.

Featured Product

Recombinant Monoclonal Anti-Claudin-18.2 Antibody

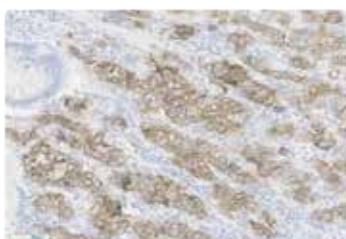
Recombinant Monoclonal Anti-PD-L1 Antibody

Recombinant Monoclonal Anti-TROP2 Antibody

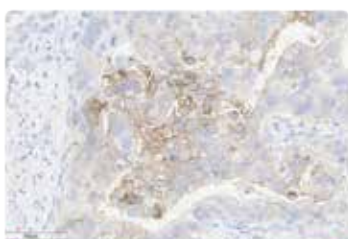
Recombinant Monoclonal Anti-CD20 Antibody

Featured Data

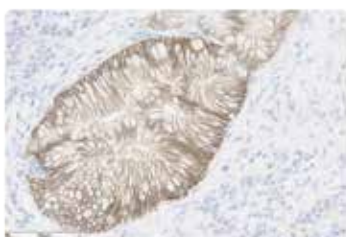
★ **Staining example of human tumor tissue samples: use Claudin-18.2 primary antibody (Cat. No. HCS-S278) to stain gastric cancer, cancer, pancreatic cancer, and ovarian cancer**



Human Gastric Cancer, 20X



Human Colorectal Cancer, 20X



Human Pancreatic Cancer, 20X



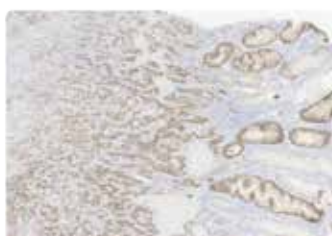
Human Ovarian Cancer, 20X

Using Claudin-18.2 primary antibody (Cat. No. HCS-S278) to stain human tumor tissue samples, positive cell cytoplasm and/or cell membrane specific positive staining (staining intensity ≥ 1), no non-specific staining (staining intensity < 1), no background staining (staining intensity < 1).

★ **Sensitivity: ACRO staining intensity is stronger than Competitor A**



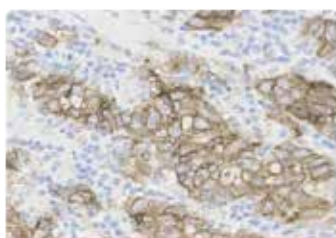
Claudin18.2 (ACRO) 1:1000-4X



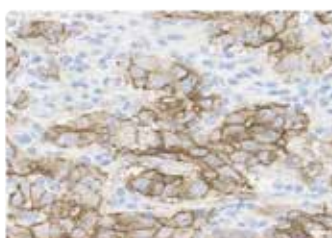
Claudin18.2 (Competitor A) 1:200-4X



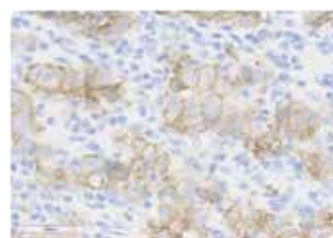
Claudin18.2 (Competitor A) 1:500-4X



Claudin18.2 (ACRO) 1:1000-40X



Claudin18.2 (Competitor A) 1:200-40X



Claudin18.2 (Competitor A) 1:500-40X

Immunohistochemical analysis of paraffin-embedded human gastric cancer labeling Claudin-18.2 with ACRO/Competitor A. Membranous staining on tumor cells is observed. Counter stained with Hematoxylin. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemical (IHC) Kit

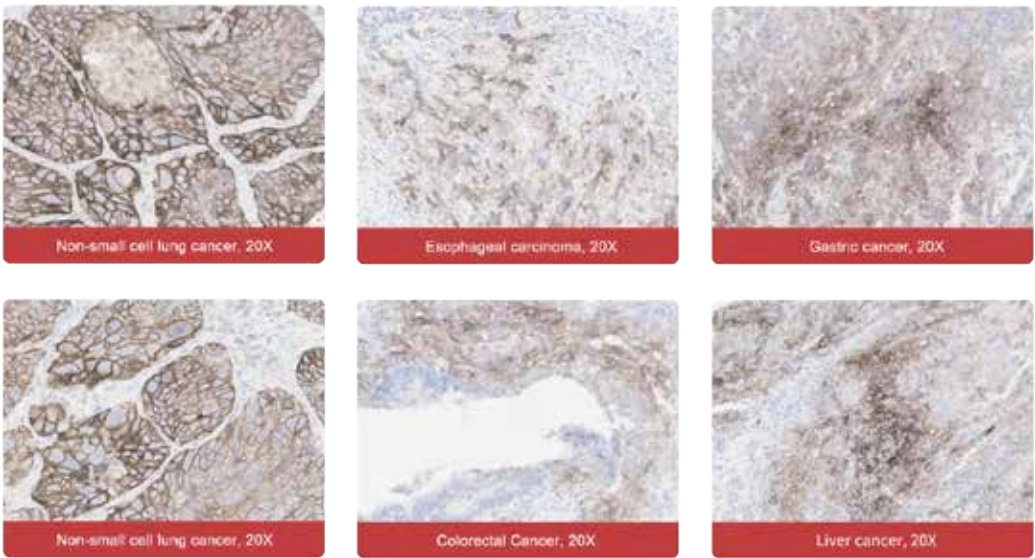
Formalin-fixed paraffin section tissue samples were detected by, incubated with ready-to-use primary antibodies, and using ready-to-use Compact Polymer technology to form visible reaction products at the antigen site. The tissue section is then, dehydrated, cleared, and fixed, and the results are observed under a light microscope.

Featured Product

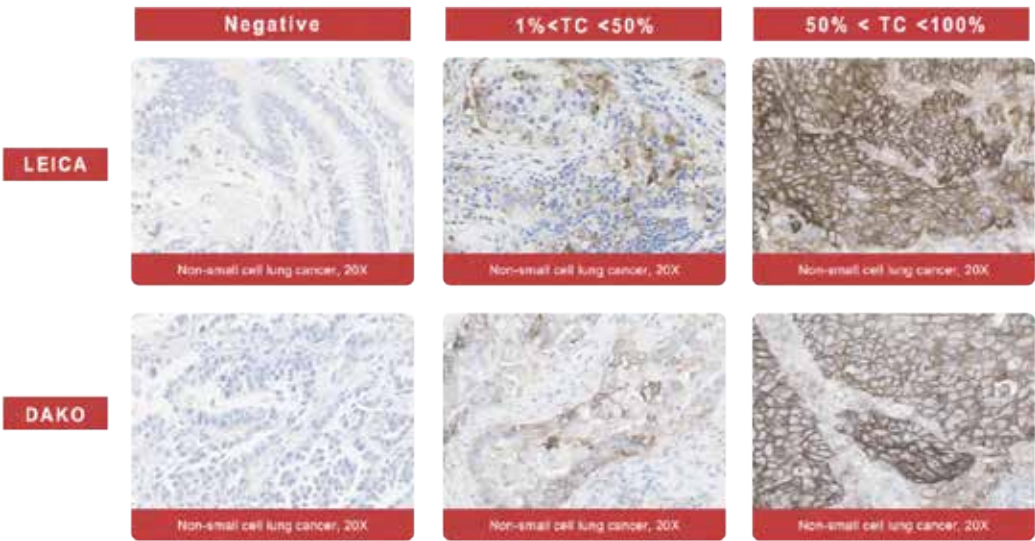
Claudin18.2 IHC 3B10 Kit	PD-L1 IHC 5D3 Kit	C-MET IHC 1A1 Kit
EGFR IHC 5A6 Kit	HER2 IHC 5D5 Kit	

Featured Data

★ Extensibility: ACRO PD-L1 5D3 expandable test: non-small cell lung cancer, esophageal cancer, gastric cancer, cancer and liver cancer.



★ Applicability: ACRO PD-L1 5D3 can be available on the LEICA BOND III and DAKO Link 48 platform



Clinical Studies

Clinical studies, or clinical trials, are research investigations conducted in humans to evaluate the safety and effectiveness of medical interventions. Clinical studies follow strict protocols and ethical guidelines, involving researchers, healthcare professionals, and regulatory oversight. They are vital for advancing medical knowledge and determining the safety and efficacy of interventions before widespread use.

■ Efficacy Evaluation: Pharmacokinetic Studies

Biotinylated Target Proteins

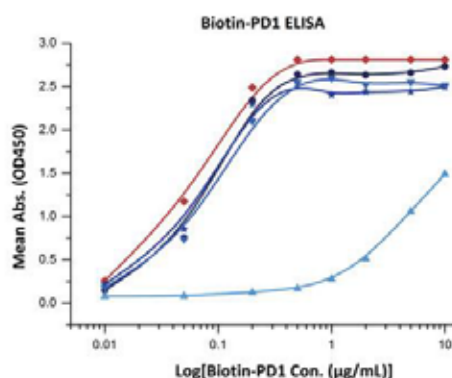
The interaction between biotin and avidin/streptavidin is incredibly strong and specific, making it an excellent tool in protein biochemistry. We have developed an exclusive collection of pre-labeled and experimentally validated biotinylated recombinant proteins named the Mabsol® which includes more than a hundred commonly studied drug targets and biomarker proteins. Mabsol® includes two unique and complimentary product series, the Precision Avi series built upon the Avitag™ technology, and the series produced using the in-house developed chemical labeling method.

Featured Product

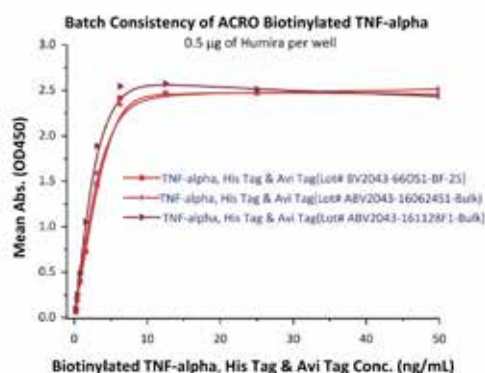
Precision Avi Series Biotinylated Target Proteins

UltraLys Series Biotinylated Target Proteins

Featured Data



Binding activity of different forms of biotinylated PD1 evaluated in a functional ELISA against rhPD-L1 (Cat. No. **PD1-H5258**).



In the above ELISA analysis, three different lots of biotinylated hTNF-alpha (Cat. No. **TNA-H82E3**) were used to detect immobilized Adalimumab (0.5 µg/ml). The result showed that the batch variation among the tested samples is negligible.

>>More Related Information: (P07)

ComboX: Streptavidin Series Products

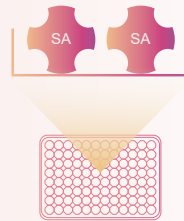
Streptavidin series products provide a reliable platform for drug-target binding studies, enabling the evaluation of drug potency and efficacy. Our comprehensive range of streptavidin series products offers high-quality and consistent performance, ensuring accurate assessment of drug effectiveness. Explore our selection of streptavidin series products to enhance your drug development process and accelerate breakthroughs in clinical research.

Featured Product

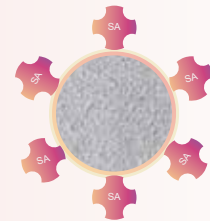
SA Proteins



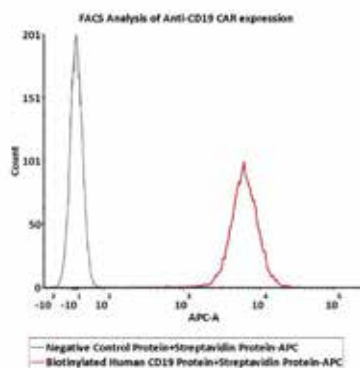
SA Coated Plates



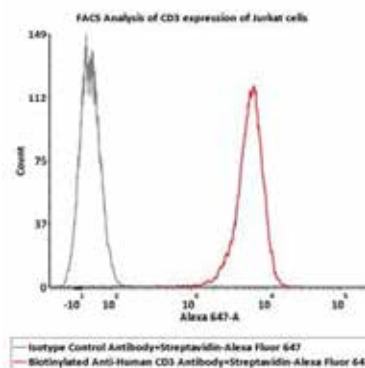
SA Magnetic Beads



Featured Data



5e5 of Anti-CD19 CAR-293 cells were stained with 100 μ L of 20 μ g/mL Biotinylated Human CD19 (20-291) Protein, Fc, Avitag, premium grade (Cat. No. **CD9-H82F6**) and negative control protein respectively, washed and then followed with 2.5 μ g/mL of Streptavidin Protein-APC (Cat. No. **STN-NA113**) and analyzed with FACS. APC signal was used to evaluate the binding activity (QC tested).



5e5 of Jurkat cells were stained with 100 μ L of 3 μ g/mL of Biotinylated Anti-Human CD3 Antibody, Mouse IgG2a, Avitag (Clone: OKT3), premium grade (Cat. No. **CDE-M525a**) and isotype control antibody respectively, washed and then followed with 100 μ L of 1 μ g/mL of Streptavidin Protein-Alexa Fluor 647 (Cat. No. **STN-NA119**) and analyzed with FACS. Alexa 647 signal was used to evaluate the binding activity (Routinely tested).

>>More Related Information: (P13)

Anti-idiotypic Antibodies

Idiotope is the unique set of antigenic determinants (epitopes) of variable portion of antibody. Anti-idiotypic antibody binds to the idiotope of another antibody, usually an antibody drug, which makes it very powerful tool for antibody drug development, especially for immunogenicity and PK/PD analysis. To support preclinical/clinical immunogenicity and PK analysis, we have developed a series of high-affinity anti-idiotypic antibodies with free protocol and our pipeline covers five targets including Adalimumab, Rituximab, Cetuximab, Rituximab, and Bevacizumab.

Featured Product

Anti-Adalimumab Antibodies

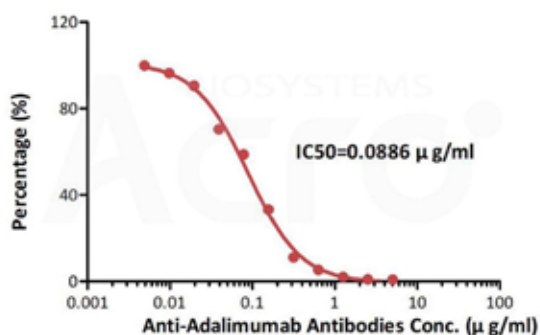
Anti-Bevacizumab Antibodies

Anti-Cetuximab Antibodies

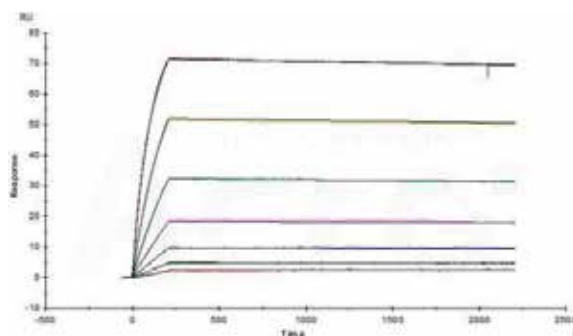
Anti-Rituximab Antibodies

Featured Data

Anti-Adalimumab Antibodies—Inhibition ELISA



Measured by its neutralizing ability in a functional ELISA. Immobilized adalimumab at 0.5 μg/mL (100 μL/well) can bind pre-mixed Anti-Adalimumab Antibody (AY19) (Cat. No. **ADB-Y19**) and Biotinylated Human TNF-alpha, His,Avitag (Cat. No. **TNA-H82E3**) with an inhibition rate of 100%.



Anti-Cetuximab Antibody (AY27) (mouse IgG1, Cat. No. **CEB-Y27**) captured on CM5 chip via anti-mouse antibodies surface, can bind Human cetuximab with an affinity constant of 7.28 pM.

>>More Related Information: (**P42**)

PK Method Development, Validation and Transfer, Kit Development Services

To meet the specific requirements of your research, we offer a one-stop service from antigen preparation to the development of monoclonal or polyclonal antibodies to antigens (ADA) as well as pharmacokinetic (PK) and immunogenicity assay kits. We ensure that the sensitivity of the PK/ADA assay kits we provide meets regulatory requirements.

Featured Service

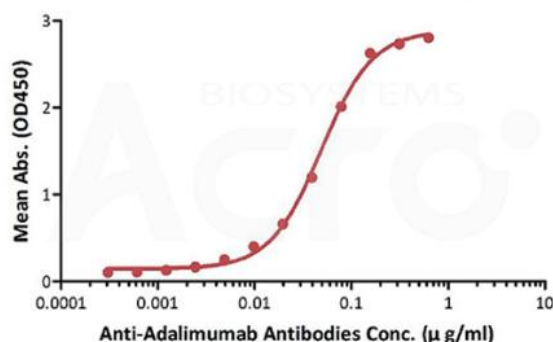
Monoclonal anti-idiotypic antibodies preparation service

Polyclonal anti-idiotypic antibody preparation service

Development of blood drug concentration/immunogenicity detection kit

Featured Data

Anti-Adalimumab Antibodies—Bridging ELISA



Anti-Adalimumab Antibodies bridging ELISA for Anti-Drug Antibody (ADA) assay development. Immobilized adalimumab at 1 μg/mL, add increasing concentrations of Anti-Adalimumab Antibodies (Cat. No. **ADB-Y19**, 10% human serum) and then add biotinylated adalimumab at 5 μg/mL. Detection was performed using HRP-conjugated streptavidin with a sensitivity of 0.6 ng/mL.

>>More Related Information: (**P46**)

■ Safety Evaluation: Toxicity Studies

In the clinical trial stage of antibody drug development, toxicology research is conducted to thoroughly evaluate the potential adverse effects of the drug on human health. This process involves a series of preclinical studies that analyze the drug's molecular mechanism, pharmacological actions, and potential toxicities. The goal is to identify any potential risks or side effects and determine the safety profile of the antibody drug.

Cytokine Detection ELISA Kits

To meet the broadly needs of cytokine detection based on ELISA method and solve its limitations such as long operation time and batch-to-batch difference, we have specifically developed a series of cytokine detection kits, aiming to provide a more reliable analytical reagent for drug discovery, quality control, preclinical study and clinical trials. Our kits are the ideal for research, optimal for clinical trials.

Featured Product

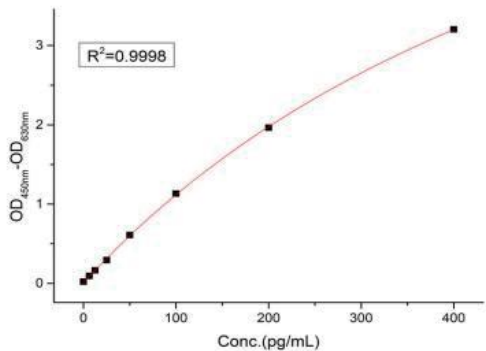
Human IL-6 ELISA Kit

Human IL-8 ELISA Kit

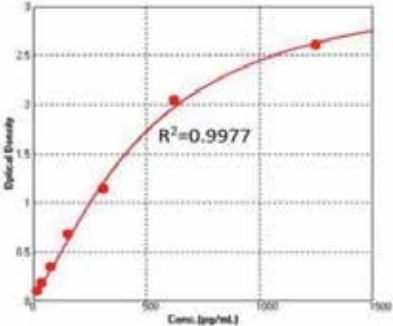
Human IL-10 ELISA Kit

Human Tumor Necrosis Factor Alpha (TNF- α) ELISA Kit

Featured Data



For each experiment, each ELISA plate needs to set the standard curve. The minimum detectable concentration of CRS-B001 is less than 2.0 pg/mL.



For each experiment, each ELISA plate needs to set the standard curve. The following CRS-A002 standard curve data is for reference only.

>>More Related Information: (P30)

■ Safety Evaluation: Immunogenicity Studies

Immunogenicity studies in clinical trials evaluate the immune response triggered by a medical intervention. These studies measure the production of antibodies or activation of immune cells in response to the intervention. They help assess the safety profile, identify potential adverse immune reactions, and inform regulatory authorities.

Biotinylated Target Proteins

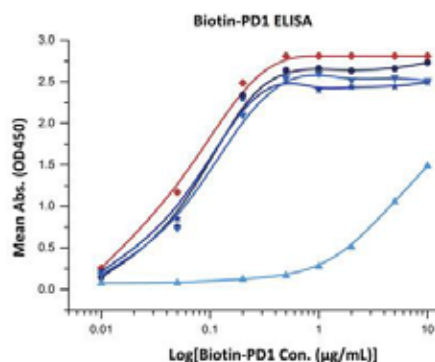
The interaction between biotin and avidin/streptavidin is incredibly strong and specific, making it an excellent tool in protein biochemistry. We have developed an exclusive collection of pre-labeled and experimentally validated biotinylated recombinant proteins named the Mabsol® which includes more than a hundred commonly studied drug targets and biomarker proteins. Mabsol® includes two unique and complimentary product series, the Precision Avi series built upon the Avitag™ technology, and the UltraLys series produced using the in-house developed chemical labeling method.

Featured Product

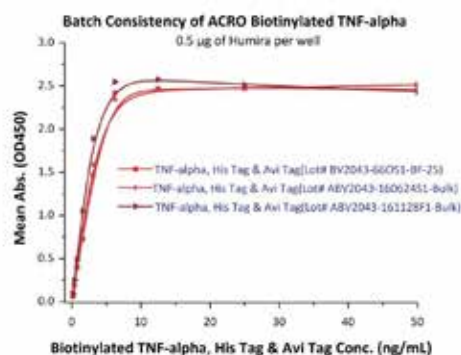
Precision Avi Series Biotinylated Target Proteins

UltraLys Series Biotinylated Target Proteins

Featured Data



Binding activity of different forms of biotinylated PD1 was evaluated in a functional ELISA against rhPD-L1 (Cat. No. **PD1-H5258**).



Three different lots of biotinylated hTNF-alpha (Cat. No. **TNA-H82E3**) were used to detect immobilized Adalimumab (0.5 µg/ml). The result showed that the batch variation among the tested samples is negligible.

>>More Related Information: (P07)

ComboX: Streptavidin Series Products

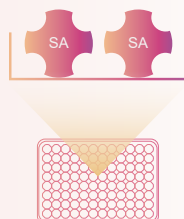
Streptavidin series products enable the investigation of potential off-target binding and interactions, aiding in the evaluation of drug specificity and potential adverse effects. Our comprehensive range of Streptavidin series products offers high-quality and reliable tools for accurate safety assessment. Explore our selection of Streptavidin series products to enhance your drug safety evaluation process and ensure the development of safe and effective therapeutics.

Featured Product

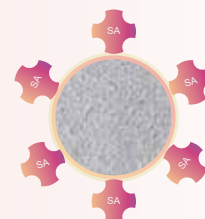
SA Proteins



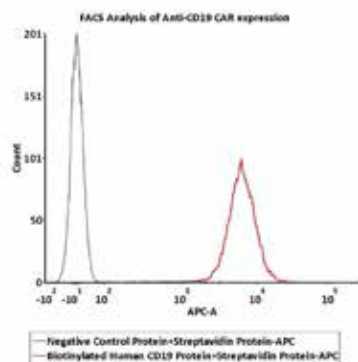
SA Coated Plates



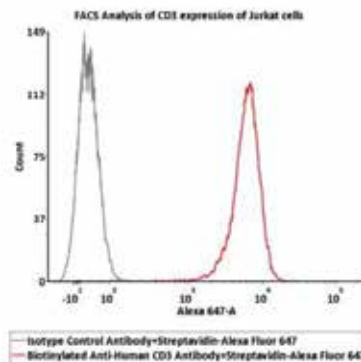
SA Magnetic Beads



Featured Data



5e5 of Anti-CD19 CAR-293 cells were stained with 100 μ L of 20 μ g/mL Biotinylated Human CD19 (20-291) Protein, Fc,Avitag, premium grade (Cat. No. **CD9-H82F6**) and negative control protein respectively, washed and then followed with 2.5 μ g/mL of Streptavidin Protein-APC (Cat. No. **STN-NA113**) and analyzed with FACS. APC signal was used to evaluate the binding activity (QC tested).



5e5 of Jurkat cells were stained with 100 μ L of 3 μ g/mL of Biotinylated Anti-Human CD3 Antibody, Mouse IgG2a,Avitag (Clone: OKT3), premium grade (Cat. No. **CDE-M525a**) and isotype control antibody respectively, washed and then followed with 100 μ L of 1 μ g/mL of Streptavidin Protein-Alexa Fluor 647 (Cat. No. **STN-NA119**) and analyzed with FACS. Alexa 647 signal was used to evaluate the binding activity (Routinely tested).

>>More Related Information: (P13)

ComboX: Universal Antibodies

Universal antibodies allow for the assessment of potential off-target binding and cross-reactivity, aiding in the identification of any unintended interactions and potential adverse effects. Our versatile range of universal antibodies offers high-quality and specific binding, enabling accurate safety evaluation. Explore our selection of universal antibodies to enhance your drug safety assessment process and ensure the development of safe and effective therapeutics.

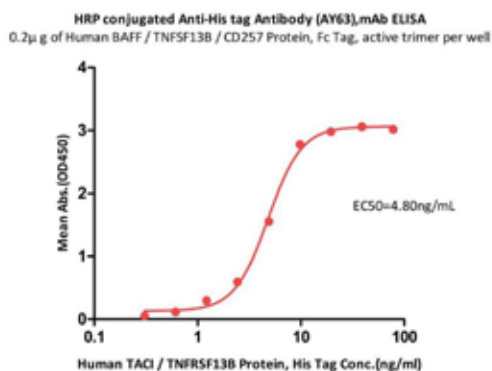
Featured Product

Anti-His Antibody

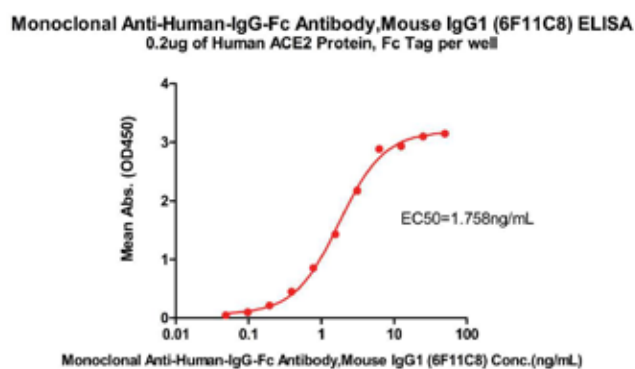
Anti-Human IgG Antibody

Anti-MMAE Antibody

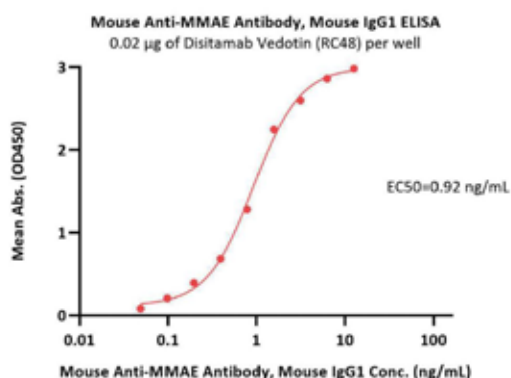
Featured Data



Immobilized Human BAFF Protein, Fc Tag (Cat. No. **BAF-H5261**) at 2 μ g/mL (100 μ L/well) can bind Human TACI Protein, His Tag (Cat. No. **TAI-H52H3**) when detected by HRP conjugated Anti-His tag Antibody (AY63), mAb (Cat. No. **HIS-LY63**) dilute at 1:5000 (0.108 μ g/mL) (QC tested).



Immobilized Human ACE2 Protein, Fc Tag (Cat. No. **AC2-H5257**) at 2 μ g/mL (100 μ L/well) can bind Monoclonal Anti-Human-IgG-Fc Antibody, Mouse IgG1 (6F11C8) (HPLC verified) (Cat. No. **IGG-AY69**) with a linear range of 0.10-3.13 ng/mL (QC tested).



Immobilized Disitamab Vedotin (RC48) at 0.2 µg/mL (100 µL/well) can bind Mouse Anti-MMAE&MMAF Antibody, Mouse IgG1 (Cat. No. **MME-M5252**) with a linear range of 0.1-2 ng/mL (QC tested).

>>More Related Information: (P14)

ComboX: Isotype Control

As essential tools for distinguishing specific binding from non-specific interactions. Our isotype controls help validate the specificity and accuracy of experimental results, ensuring reliable interpretation of drug-induced effects. By providing a baseline for comparison, isotype controls contribute to the comprehensive evaluation of drug safety and aid in the identification of potential adverse reactions, facilitating the development of safer pharmaceutical interventions.

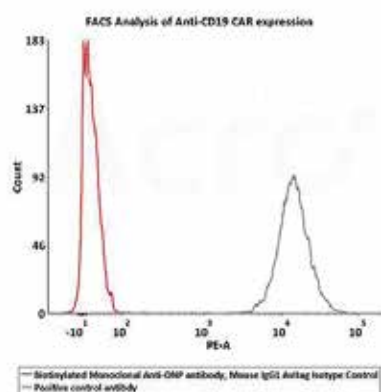
Featured Product

IgG Isotype Controls

IgG Fc Proteins

Serum Albumin

Featured Data



2e5 of anti-CD19 CAR-293 cells were stained with 100 µL of 1:50 dilution (2 µL stock solution in 100 µL FACS buffer) Biotinylated Mouse IgG1 kappa Isotype Control (Cat. No. **DNP-BM190**) and positive control antibody (Cat. No. **FM3-BY54**) respectively, washed and then followed by PE-SA and analyzed with FACS (QC tested).

>>More Related Information: (P15)

Anti-idiotypic Antibodies

Idiotope is the unique set of antigenic determinants (epitopes) of variable portion of antibody. Anti-idiotypic antibody binds to the idiotope of another antibody, usually an antibody drug, which makes it very powerful tool for antibody drug development, especially for immunogenicity and PK/PD analysis. To support preclinical/clinical immunogenicity and PK analysis, we have developed a series of high-affinity anti-idiotypic antibodies with free protocol and our pipeline covers five targets including Adalimumab, Rituximab, Cetuximab, Rituximab, and Bevacizumab.

Featured Product

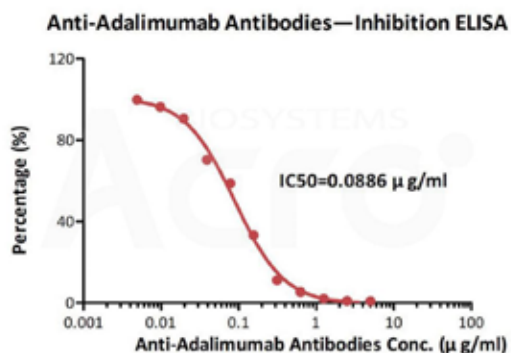
Anti-Adalimumab Antibodies

Anti-Bevacizumab Antibodies

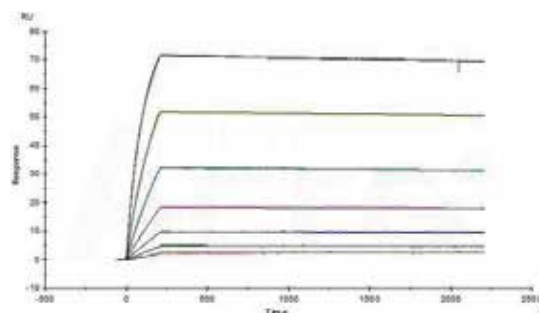
Anti-Cetuximab Antibodies

Anti-Rituximab Antibodies

Featured Data



Measured by its neutralizing ability in a functional ELISA. Immobilized adalimumab at 0.5 μ g/mL (100 μ L/well) can bind pre-mixed Anti-Adalimumab Antibody (AY19) (Cat. No. **ADB-Y19**) and Biotinylated Human TNF-alpha, His,Avitag (Cat. No. **TNA-H82E3**) with an inhibition rate of 100%.



Anti-Cetuximab Antibody (AY27) (mouse IgG1, Cat. No. **CEB-Y27**) captured on CM5 chip via anti-mouse antibodies surface, can bind Human cetuximab with an affinity constant of 7.28 pM.

>>More Related Information: (P42)

Anti-idiotypic Antibody Development Services, Immunogenic Reagents, and Kit Development Services

Anti-idiotypic antibodies are antibodies that target the variable region of another antibody to produce specific binding. These antibodies are widely used in drug development: they can be used as an important reference standard for immunogenicity analysis or can be developed to specifically detect antibody drug levels for pharmacokinetic studies.

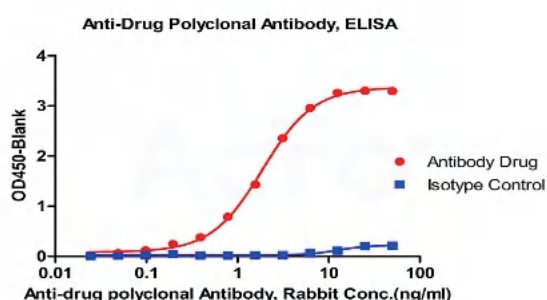
Featured Product

Monoclonal anti-idiotypic antibodies preparation service

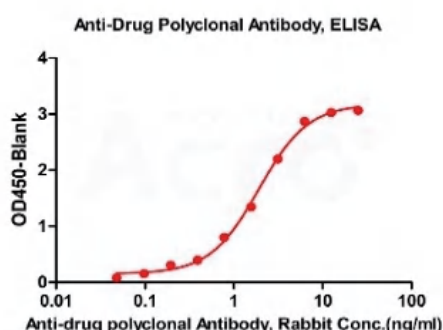
Polyclonal anti-idiotypic antibody preparation service

Development of blood drug concentration/immunogenicity detection kit

Featured Data



New Zealand white rabbits were immunized with full-length monoclonal antibodies. The antiserum was affinity purified for polyclonal antibodies specific to the drug. Cross reactivity to subtype control was less than 2%.



New Zealand white rabbits were immunized with polypeptide-KLH conjugates. Antiserum was purified by affinity chromatography until antibody titer was more than 1:712,000.

>>More Related Information: (P46)

■ Efficacy & Safety Evaluation: Companion Diagnostics

Immunohistochemistry is a technique for locating, qualitatively and quantitatively studying antigens in tissue cells based on the specific binding of antigens and antibodies and the reaction of enzyme-labeled antibodies with substrate solutions. In the clinical stage Immunohistochemistry (IHC) is a diagnostic standard and helps to determine the spatial distribution of cancer markers, thereby helping to clarify treatment strategies and available therapies.

Immunohistochemical (IHC) Antibodies

Immunohistochemistry (IHC) is an antibody-based technology, using the principle of specific binding of antigen and antibody, through the reaction of enzyme labeled antibody and substrate solution, so as to conduct the localization, qualitative and quantitative research of intracellular antigen in tissue cells. This new technique has been widely used in its strong specificity, high sensitivity and accurate localization, and in many fields of biological and medical research.

Featured Product

Recombinant Monoclonal Anti-Claudin-18.2 Antibody

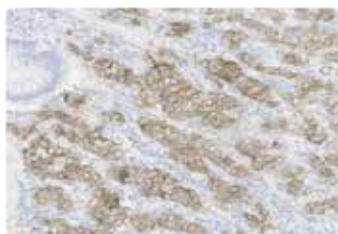
Recombinant Monoclonal Anti-PD-L1 Antibody

Recombinant Monoclonal Anti-TROP2 Antibody

Recombinant Monoclonal Anti-CD20 Antibody

Featured Data

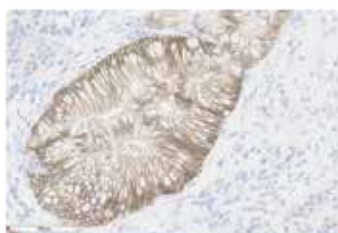
★ **Staining example of human tumor tissue samples: use Claudin-18.2 primary antibody (Cat. No. HCS-S278) to stain gastric cancer, colorectal cancer, pancreatic cancer, and ovarian cancer tissue samples respectively**



Human Gastric Cancer, 20X



Human Colorectal Cancer, 20X



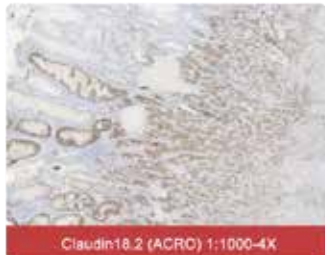
Human Pancreatic Cancer, 20X



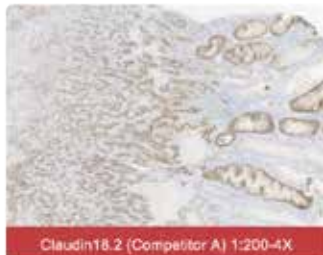
Human Ovarian Cancer, 20X

Using Claudin-18.2 primary antibody (Cat. No. HCS-S278) to stain human tumor tissue samples, positive cell cytoplasm and/or cell membrane specific positive staining (staining intensity ≥ 1), no non-specific staining (staining intensity < 1), no background staining (staining intensity < 1).

★ **Sensitivity: ACRO staining intensity is stronger than Competitor A**



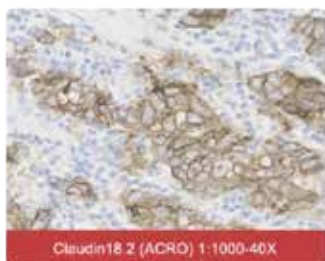
Claudin18.2 (ACRO) 1:1000-4X



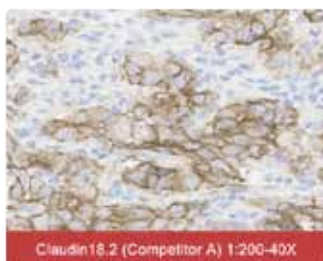
Claudin18.2 (Competitor A) 1:200-4X



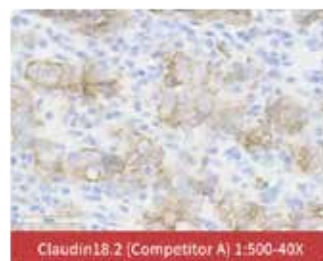
Claudin18.2 (Competitor A) 1:500-4X



Claudin18.2 (ACRO) 1:1000-40X



Claudin18.2 (Competitor A) 1:200-40X



Claudin18.2 (Competitor A) 1:500-40X

Immunohistochemical analysis of paraffin-embedded human gastric cancer labeling Claudin-18.2 with ACRO/Competitor A. Membranous staining on tumor cells is observed. Counter stained with Hematoxylin. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Immunohistochemical (IHC) Kit

Formalin-fixed paraffin section tissue samples were detected by immunohistochemistry, incubated with ready-to-use primary antibodies, and chromogenic using ready-to-use Compact Polymer technology to form visible reaction products at the antigen site. The tissue section is then counterstained, dehydrated, cleared, and fixed, and the results are observed under a light microscope.

Featured Product

Claudin18.2 IHC 3B10 Kit

PD-L1 IHC 5D3 Kit

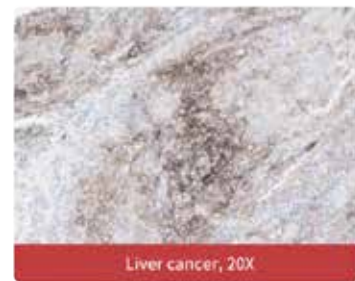
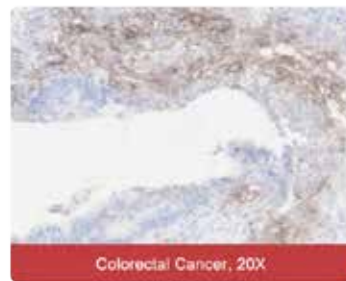
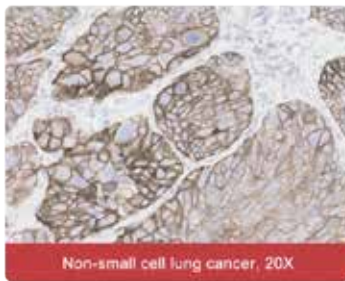
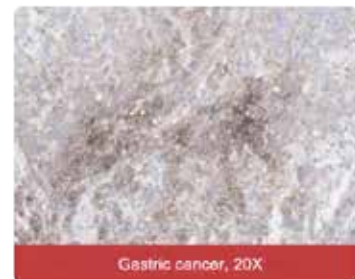
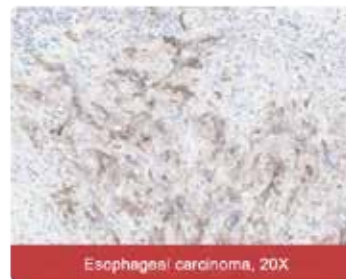
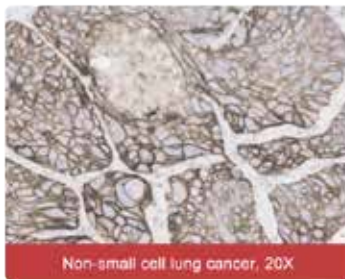
C-MET IHC 1A1 Kit

EGFR IHC 5A6 Kit

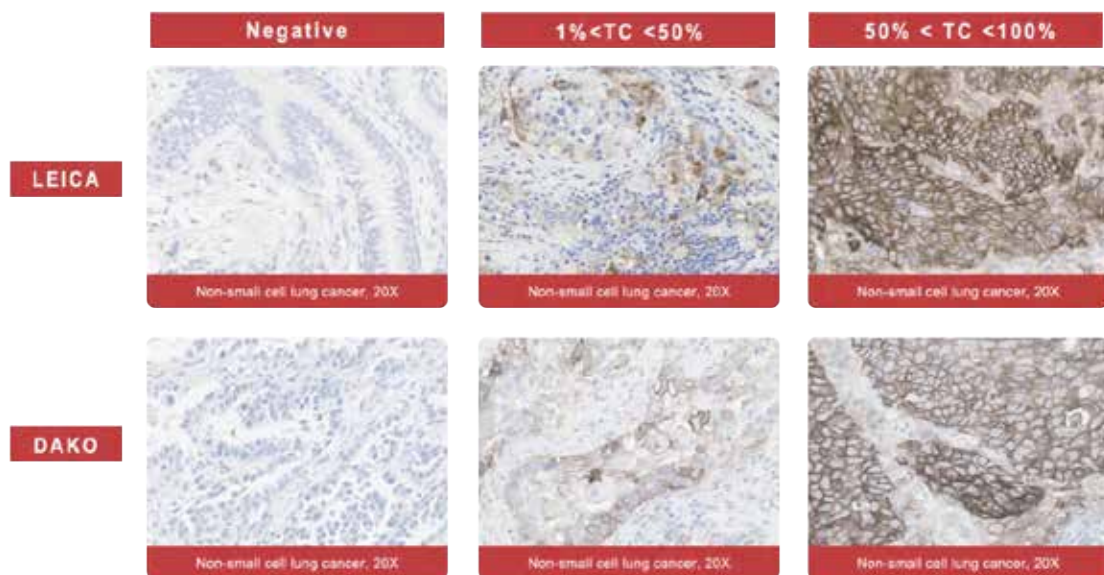
HER2 IHC 5D5 Kit

Featured Data

★ **Extensibility:** ACRO PD-L1 5D3 expandable test: non-small cell lung cancer, esophageal cancer, gastric cancer, colorectal cancer and liver cancer.



★ **Applicability:** ACRO PD-L1 5D3 can be available on the LEICA BOND III and DAKO Link 48 platform



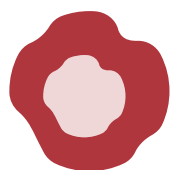
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Biotinylated Protein
 PD-L1 VEGF165 CD3 epsilon
ACE2 PD-1 Spike
 CD27 PVRIG
 CD47 PSMA
ACE2 FGL1 TFPI
 Siglec-15 Integrin
CD24 S protein RBD Spike
S trimer ACE2 PCSK9
 S protein RBD Nucleocapsid
Neutralizing Antibody
 Glypican 3 Integrin Spike
ECRn S protein RBD
 EGF R ACE2 BCMA CD30 Spike
 Integrin TIGIT TGF-beta 1 CD3E & CD3G
ELISA
4-1BB Siglec-15
Biotinylated Protein
S RBD CD200 GTR Nectin-4
 VEGF165 CD73 FGLI
 PCSK9 CD69 Nectin-4
 IgG1 Fc CD40 **Spike** PD-L1
 SIRP alpha Nucleocapsid PSMA
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