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YOUR TARGET MOLECULES

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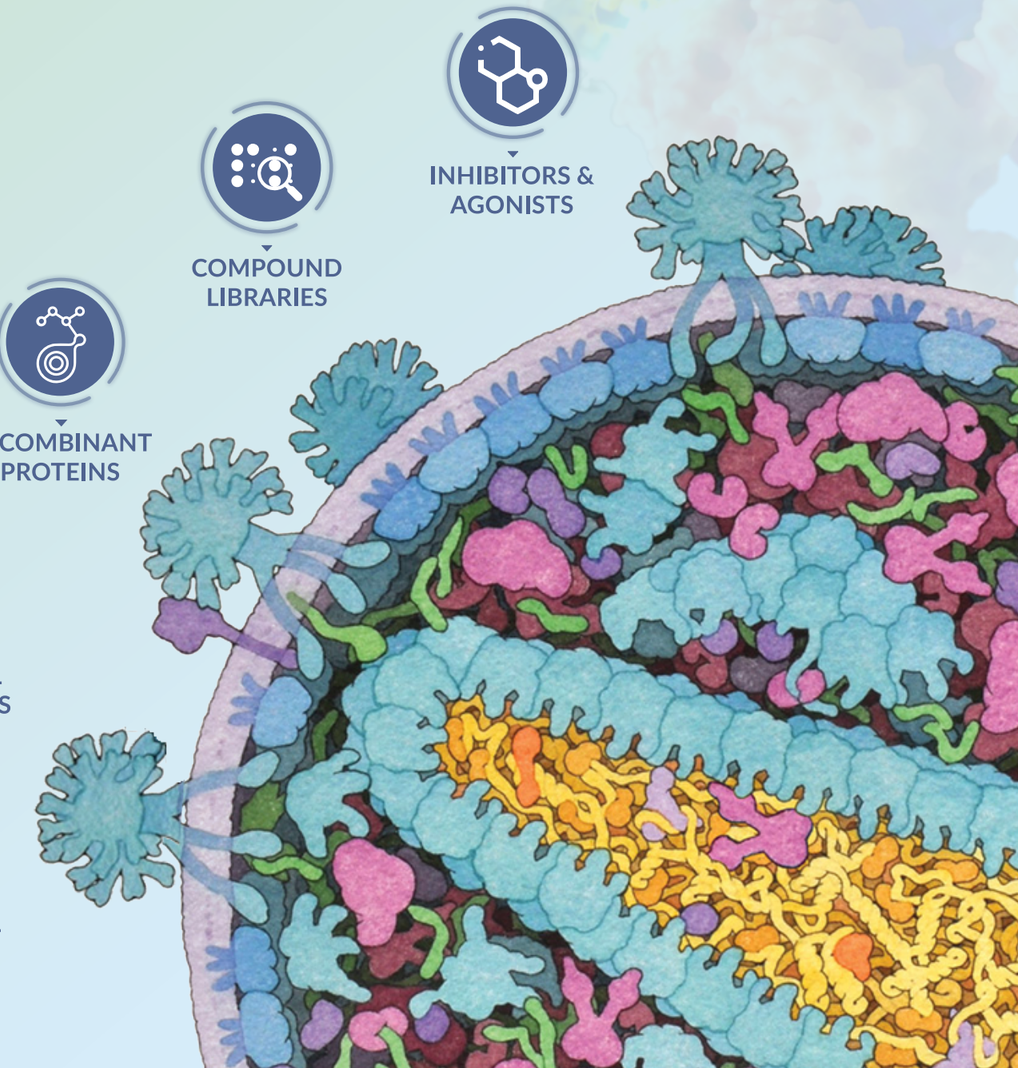
RECOMBINANT PROTEINS



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RECOMBINANT PROTEINS | NATURAL PRODUCTS

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Recombinant Protein

Recombinant proteins are proteins produced using recombinant DNA or RNA technology in host cells. Compared to proteins extracted from natural sources, recombinant proteins have a wider range of sources, higher yields, and more controlled quality, making them play a crucial role in life science research. They are applied in many fields, such as cell culture, activity assays, exploration of protein structure and function, immunology research, drug development, cell therapy, virology research, enzyme studies, etc.

TargetMol currently offers over 13,000 recombinant protein products, covering multiple categories including cytokines, growth factors, receptor proteins, enzymes, and viral proteins. Multiple expression systems can be selected, including prokaryotic systems, mammalian cells, yeast, and insects, etc. We also provide a variety of species options and tag choices. Most of our products are supplied in lyophilized powder to ensure protein stability.

Advantages

Extensive Ranges of Protein Categories

Cytokines and Growth Factors, Fluorescent Proteins, CAR-T Therapy Target Proteins, Immune Checkpoint Proteins, Receptor Proteins, CD Proteins, Enzymes, Hormones, Complement System, Viral Proteins, etc.

Diverse Species

Human, Mouse, Rat, Rhesus Macaque, Feline, Canine, Bovine, Sheep, Porcine, Rabbit, Virus, Bacteria, Fungi, Plants, etc.

Various Expression Systems

E. coli, Yeast, Mammalian Cells, Baculovirus Insect Cells, Cell-Free, VLP, etc.

High Quality

Tests for biological activity, binding affinity and enzyme activity ensure activity requirements; SDS-PAGE and HPLC are validated to ensure high purity.

Low Endotoxin

Tested by LAL assay. Most products have endotoxin levels lower than 1 EU/μg and some below 0.01 EU/μg.

High Stability

High stability across batches guarantees experimental reproducibility.

Selective Tags

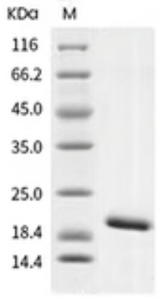
Tag Free, His, Flag, Avi, Myc, HA, SUMO, T7, Fc, GST, etc.

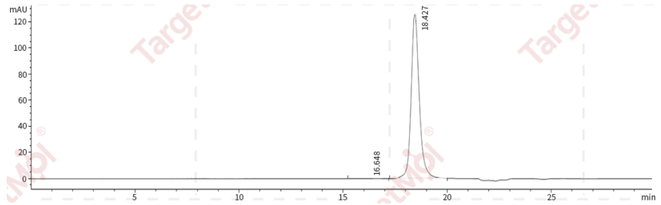
Carrier-Free

Buffer free of bovine serum albumin (BSA).

Product Data

High Purity

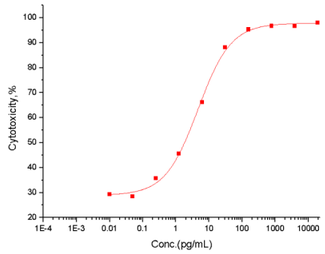


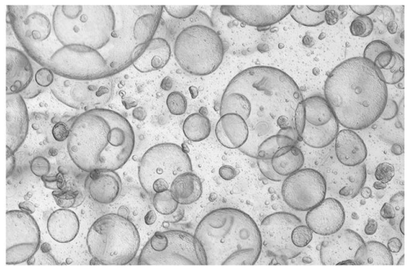


The purity of Human IL-1 beta Protein (TMPY-01049) was > 95% determined by SDS-PAGE and > 95% determined by SEC- HPLC.

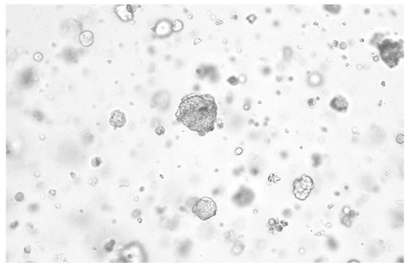
High Bioactivity

The activity of Human TNF alpha Protein (TMPY-00936) was measured in a cytotoxicity assay using L929 mouse fibrosarcoma cells in the presence of the metabolic inhibitor actinomycin D. The ED_{50} for this effect is typically 3-30 pg/mL.





Human kidney organoids were cultured with FGF7 (Cat#TMPY-00403), EGF (Cat#TMPY-03701), FGF10 (Cat#TMPY-01061), NOG (Cat#TMPY-02594), RSPO1 (Cat#TMPY-03626), HGF (Cat#TMPY-02327), FGF4 (Cat#TMPY-05004).



Human breast cancer organoids were cultured with FGF7 (Cat#TMPY-00403), RSPO1 (Cat#TMPY-03626), IGF1 (Cat#TMPY-06982), EGF (Cat#TMPY-03701), NRG1 Beta 1 (Cat#TMPY-02600), NOG (Cat#TMPY-02594).

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Cytokines and Growth Factors

Cytokines are small proteins that play a crucial role in cell signaling. They typically exert functions through interactions with specific cytokine receptors on the surface of targets. Growth factors are secreted bioactive molecules that can influence cell growth. Both cytokines and growth factors are commonly used in fields such as cell culture, differentiation, stem cell culture, organoid culture, cell therapy, drug development, and vaccine research [1][2].

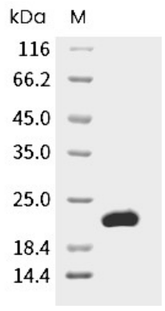
TargetMol offers a wide range of cytokines and growth factors with high purity, high activity, low endotoxin and high stability. These products are particularly suitable for in vitro culture of stem cells, organoids, immune cells, and other cell types, supporting cell growth, proliferation, and differentiation.

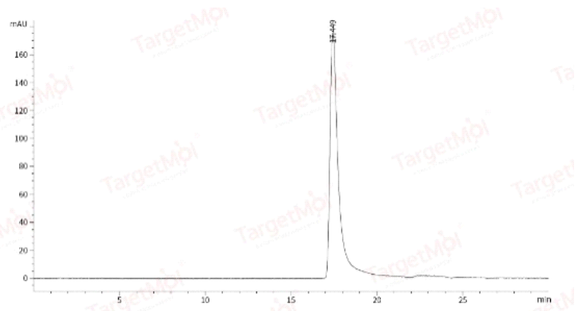
Product Data

FGF-10 Protein, Human, Recombinant (TMPY-01061)

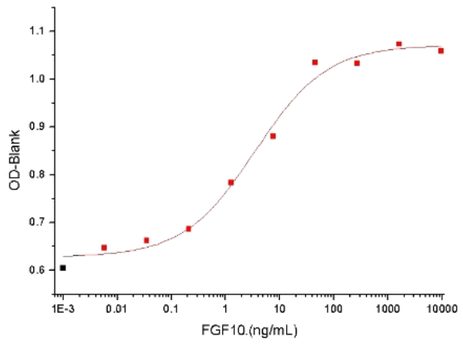
Endotoxin: < 5 EU per mg of the protein.

Purity: The purity of FGF-10 Protein, Human, Recombinant (TMPY-01061) was >95% as determined by SDS-PAGE and >95% as determined by SEC-HPLC.

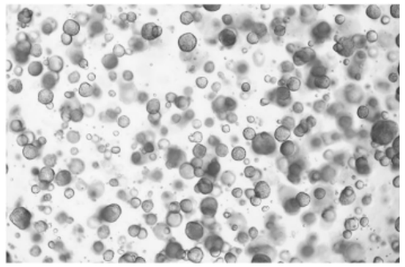




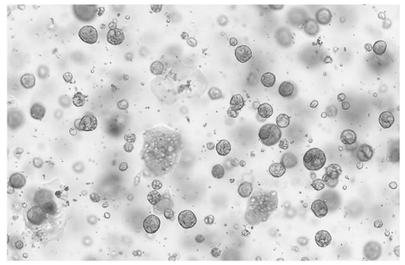
Bioactivity: Measured in a cell proliferation assay using BaF3 mouse pro-B cells transfected with human FGFR2b. The ED_{50} for this effect is typically 3-30 ng/mL.



Organoid Culture Validation



Human lung organoids were cultured with FGF2 (Cat#TMPY-00749), FGF4 (Cat#TMPY-05004), FGF7 (Cat#TMPY-00403), EGF (Cat#TMPY-03701), FGF10 (Cat#TMPY-01061), NOG (Cat#TMPY-02594), RSPO1 (Cat#TMPY-03626).



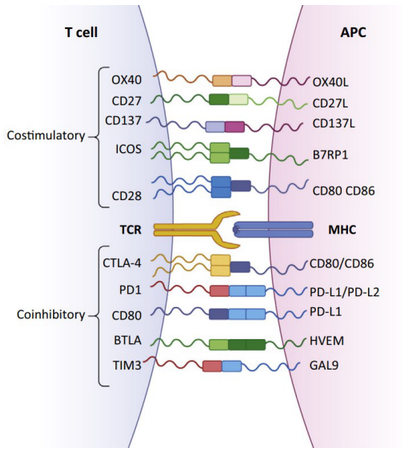
Human liver cancer organoids were cultured with FGF2 (Cat#TMPY-00749), HGF (Cat#TMPY-02327), FGF7 (Cat#TMPY-00403), EGF (Cat#TMPY-03701), FGF10 (Cat#TMPY-01061), TGFB1 (Cat#TMPY-02638), NOG (Cat#TMPY-02594), RSPO1 (Cat#TMPY-03626).

Catalog No.	Protein Name	Species	Expression Systems	Tags	Purity	Bioactivity
TMPY-00083	Angiopoietin-2	Human	HEK293	His	>95%	Binding Activity
TMPY-01136	BMP-2	Human/Mouse/Rat /Rhesus/Canine	E. coli	Tag Free	>95%	Cell Activity
TMPY-06842	BMP-4	Human	E. coli	Tag Free	⩾95%	Cell Activity
TMPY-01560	EGF	Human	E. coli	Tag Free	⩾95%	Cell/Organoid Activity
TMPY-01061	FGF-10	Human	E. coli	Tag Free	⩾95%	Cell Activity
TMPY-00749	FGF-2/FGFb	Human	E. coli	Tag Free	⩾95%	Cell/Organoid Activity
TMPY-05004	FGF-4	Human	E. coli	Tag Free	⩾95%	Cell Activity
TMPY-03382	FGF-6	Human	E. coli	Tag Free	>95%	Cell Activity
TMPY-00403	FGF-7/KGF	Human	E. coli	His	⩾95%	Cell Activity
TMPY-05636	G-CSF	Mouse	HEK293	Tag Free	>95%	Cell/Binding Activity
TMPJ-01465	GM-CSF	Human	E.coli	Tag Free	>95%	Cell Activity
TMPY-02327	HGF	Human	CHO	Tag Free	⩾95%	Cell/Binding Activity
TMPY-06983	IFN gamma	Human	E. coli	Tag Free	⩾95%	Cell Activity
TMPY-03145	IFN-beta	Human	CHO	Tag Free	>95%	Cell Activity
TMPY-06982	IGF1	Human	E. coli	Tag Free	>95%	Cell/Organoid/Binding Activity
TMPY-02134	IL-1 beta	Mouse	E. coli	Tag Free	>97%	Cell Activity
TMPY-03547	IL-10	Human	E. coli	Tag Free	>95%	Cell/Binding Activity

Catalog No.	Protein Name	Species	Expression Systems	Tags	Purity	Bioactivity
TMPY-04632	IL-15	Human	E. coli	Tag Free	⩾95%	Cell/Binding Activity
TMPJ-01463	IL-2	Human	E. coli	Tag Free	>95%	Cell/Binding Activity
TMPY-06258	IL-2	Human	HEK293	Tag Free	>95%	Cell/Binding Activity
TMPY-00406	IL-23	Human	HEK293	His	>90%	Cell Activity
TMPY-01862	IL-4	Human	E. coli	Tag Free	⩾95%	Cell Activity
TMPY-03383	IL-7	Human	E. coli	Tag Free	⩾95%	Cell Activity
TMPY-00464	M-CSF/CSF1	Mouse	HEK293	Tag Free	>95%	Cell/Binding Activity
TMPY-05202	Noggin	Human	HEK293	Tag Free	⩾95%	Cell Activity
TMPJ-00735	PDGF-BB	Human	E. coli	Tag Free	>98%	Cell Activity
TMPY-03626	R-Spondin 1	Human	CHO	Tag Free	⩾95%	Cell/Organoid Activity
TMPY-02638	TGF beta 1	Human/Rhesus/ Cynomolgus/Canine	CHO	Tag Free	>95%	Cell Activity
TMPY-00936	TNF alpha	Human	E. coli	Tag Free	⩾95%	Cell/Binding Activity
TMPJ-00864	VEGF165	Human	HEK293	Tag Free	>95%	Binding Activity
TMPY-06987	Wnt3a	Human	HEK293	hFc	⩾90%	Cell Activity

Immune Checkpoint Proteins

Immune checkpoints are key regulatory factors on the surface of immune cells that help the immune system distinguish between self-cells and foreign pathogens (such as bacteria, viruses, or cancer cells) and prevent the immune system from becoming overactive. In the tumor microenvironment, some cancer cells can exploit these checkpoints to evade immune system attacks. Thus, drugs targeting these immune checkpoints have been developed for cancer treatment. By blocking these checkpoints, T cells can be reactivated to attack cancer cells and enhance the anti-tumor immune response. The most studied pathways currently are CTLA-4 and PD-1/PD-L1[3][4]. TargetMol offers a wide range of immune checkpoint proteins of various species, tags and labels. These proteins are ideal for immunoassays and antibody screening. They are also crucial for the development of antibody drugs targeting cancer, tumors, autoimmune diseases, and for research into regulating cellular immune responses.



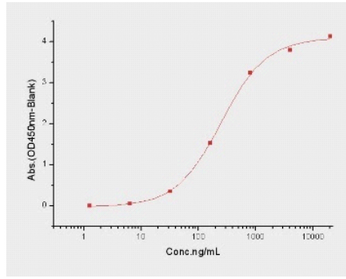
Co-stimulatory and co-inhibitory receptors in the immunological synapse[5]

Product Data

PD-1 Protein, Human, Recombinant (His) (TMPY-00897)

Receptor binding validation

Immobilized PD-1 Protein, Human, Recombinant (His) at 2 μg/mL (100 μL/well) can bind PD-L1 Protein, Human, Recombinant (ECD, hFc Tag), the EC_{50} of Human PD-L1 is 150-600 ng/mL.

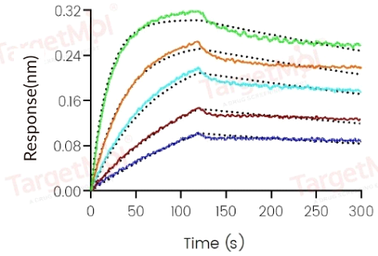


Antibody binding validation

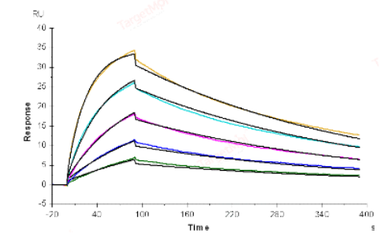
Immobilized PD-1 Protein, Human, Recombinant (His) at 2 μg/mL (100 μL/well) can bind Anti-PD1 (MDX)-IgG4 Antibody (Nivolumab), the EC_{50} is 8-60 ng/mL.

Affinity validation

Loaded Anti-human PD1 antibody, IgG4 on ProA Biosensor, can bind PD-1 Protein, Human, Recombinant (His) with an affinity constant of 2.44 nM as determined in a BLI assay.



Captured Anti-PD1 Mab (Human IgG4) on proA Chip can bind PD-1 Protein, Human, Recombinant (His) with an affinity constant of 10.03 nM as determined in a SPR assay.



Catalog No.	Protein Name	Species	Expression Systems	Tags	Purity	Bioactivity
TMPY-01743	4-1BB	Human	HEK293	His	⩾95%	ELISA
TMPJ-00139	4-1BBL	Human	E. coli	His	>95%	ELISA/BLI
TMPY-01063	B7-1	Human	HEK293	His	⩾95%	ELISA/BLI
TMPY-02031	B7-H3	Human	HEK293	His	⩾98%	ELISA
TMPY-03524	B7-H4	Human	HEK293	His	>95%	ELISA
TMPK-01066	BTLA	Human	HEK293	His&Avi	>95%	ELISA/SPR
TMPY-01386	CD155/PVR	Human	HEK293	His	⩾97%	ELISA/BLI
TMPY-01180	CD86	Human	HEK293	His	>97%	ELISA/BLI
TMPY-02011	CD96	Human	HEK293	His	>90%	ELISA
TMPY-04824	CTLA-4	Human	HEK293	Tag Free	>95%	ELISA
TMPY-01152	DNAM-1/CD226	Human	HEK293	His	⩾97%	ELISA
TMPY-04989	Galectin-9	Human	HEK293	hFc	>90%	Testing in progress
TMPY-00072	GITR	Human	HEK293	His	>95%	ELISA
TMPK-00053	GITRL	Human	HEK293	His&Flag	>95%	ELISA
TMPY-01750	HVEM	Human	HEK293	His	⩾90%	ELISA
TMPY-05156	ICOS	Human	HEK293	rFc	>95%	ELISA
TMPY-01672	ICOSL	Human	HEK293	His	>98%	ELISA
TMPY-04730	LAG-3	Human	HEK293	His	⩾95%	ELISA/BLI/SPR
TMPY-00748	Nectin-2	Human	HEK293	Tag Free	⩾95%	ELISA/BLI
TMPY-01154	Nectin-3	Human	HEK293	His	>98%	ELISA
TMPY-01423	OX40	Human	HEK293	His	⩾95%	ELISA
TMPY-04354	OX40L	Human	HEK293	mFc	>90%	ELISA
TMPY-00897	PD-1	Human	HEK293	His	>95%	ELISA/BLI/SPR
TMPY-04343	PD-L1	Human	HEK293	His	⩾95%	ELISA/SPR
TMPY-04346	PD-L2	Human	HEK293	His	⩾98%	ELISA
TMPY-06277	PVRIG	Human	HEK293	mFc	>90%	ELISA/BLI
TMPY-06051	SIRP alpha	Human	HEK293	hFc	>95%	ELISA
TMPY-01853	SIRP gamma	Human	HEK293	His	⩾96%	ELISA
TMPY-04970	TIGIT	Human	HEK293	hFc	⩾95%	ELISA/BLI
TMPY-01621	TIM-3	Human	HEK293	His	⩾95%	SPR

CAR-T Therapy Target Proteins

CAR (Chimeric Antigen Receptor) -T Cell therapy is a revolutionary immunotherapy that modifies a patient's T cells to recognize and attack cancer cells via chimeric antigen receptors (CARs). With the approval of CAR-T therapies such as Kymriah and Yescarta, this treatment has rapidly advanced, showing great potential [6].

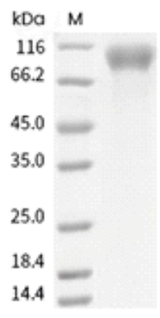
TargetMol offers a range of high-quality CAR-T related target protein products, including popular targets such as BCMA, MSLN, HER2, CD19, and CD20. We provide various species options, including human, mouse, rat, cynomolgus monkey, and rhesus monkey, and offer multiple labeling types such as fluorescent and biotin labels. Most proteins are produced using human expression systems, ensuring protein structures closely resemble natural proteins. These products are ideal for use in immunology, antibody screening, affinity studies, and more.

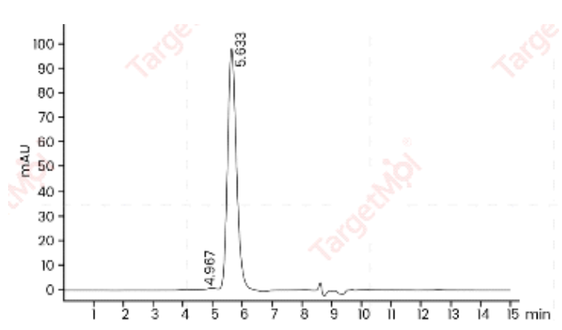
Product Data

HER2/ERBB2 Protein, Human, Recombinant (TMPY-00167)

High Purity：validated by SDS-PAGE and SEC-HPLC

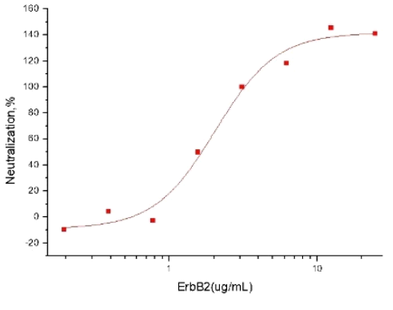
The purity of HER2/ERBB2 Protein, Human, Recombinant (TMPY-00167) was ⩾95% as determined by SDS-PAGE and ⩾95% as determined by SEC-HPLC.



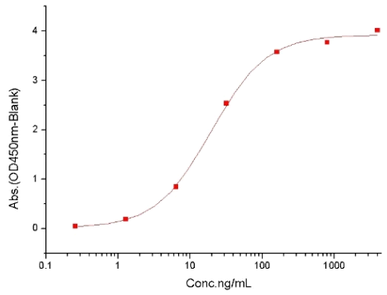


High Bioactivity

Measured by its ability to block Anti-ErbB2/Her2 mediated inhibition of BT474 human breast ductal carcinoma cell proliferation. The ED_{50} for this effect is 0.3-1.5 μg/mL in the presence of 0.6 μg/mL Anti-ErbB2/Her2 Monoclonal Antibody.



Immobilized HER2/ERBB2 Protein, Human, Recombinant at 2 μg/mL (100 μL/well) can bind Herceptin, the EC_{50} of Herceptin is 7.0-30.0 ng/mL.



Catalog No.	Protein Name	Species	Expression Systems	Tags
TMPY-05319	BCMA	Human	HEK293	His
TMPY-01410	CD123	Human	HEK293	His
TMPY-01949	CD19	Human	HEK293	His
TMPY-05271	CD20, Biotinylated	Human	E. coli	TrxA
TMPY-05201	CD22	Human	HEK293	Tag Free
TMPY-01023	CD38	Human	HEK293	His
TMPY-06596	Claudin-18.2	Human	HEK293	Tag Free
TMPY-00742	EGFR	Human	HEK293	His
TMPY-04922	FAP, Biotinylated	Human	HEK293	His
TMPY-01283	GPC3	Human	HEK293	His
TMPY-06806	GPRC5D	Human	HEK293	GFP
TMPY-00167	HER2	Human	HEK293	Tag Free
TMPY-01142	ICAM-1	Human	HEK293	His
TMPK-00960	MSLN, PE-Labeled	Human	HEK293	His&Avi
TMPY-06364	SSTR2	Human	HEK293	Tag Free

Fc Receptors

Fc receptors are receptors for immunoglobulins that activate immune responses by binding to the Fc region of antibodies. These receptors play a crucial role in regulating antibody-dependent cellular cytotoxicity and phagocytosis. The effectiveness of therapeutic antibodies depends not only on their binding to the target antigen but also on the interaction between their Fc fragment and Fc receptors. Therefore, optimizing the structure of antibodies and selecting those with the best affinity for Fc receptors is a key step in the development of therapeutic antibody drugs [7][8].

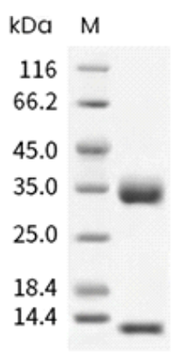
TargetMol offers a range of high-purity and high-activity recombinant Fc receptor proteins that meet the stringent purity requirements for antibody drug development. These products cover multiple species, making them suitable for cross-species experiments. They are mainly expressed in HEK293 cells, ensuring proper post-translational modifications and correct protein folding. These Fc receptor proteins can be widely used in various research fields, including antibody drug design, cancer treatment, immune response regulation, and biomarker detection.

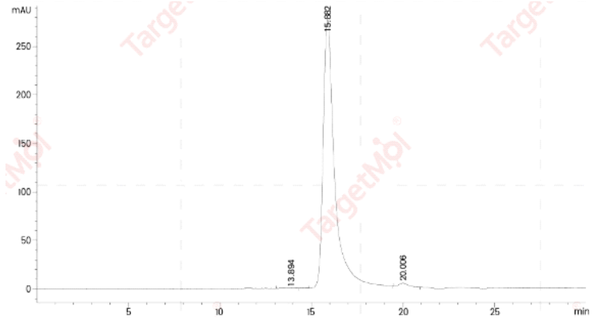
Product Data

FCGRT & B2M Heterodimer Protein, Human, Recombinant (His) (TMPY-02082)

High Purity: validated by SDS-PAGE and SEC-HPLC

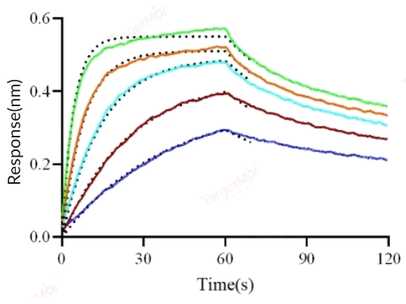
The purity of FCGRT & B2M Heterodimer Protein, Human, Recombinant (His) (TMPY-02082) was >95% as determined by SDS-PAGE and >90% as determined by SEC-HPLC.



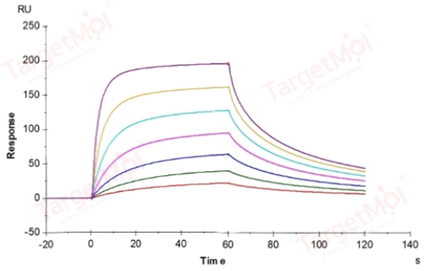


Binding: validated by SPR and BLI

Loaded FCGRT & B2M Heterodimer Protein, Human, Recombinant (His) on His1k Biosensor, can bind IgG4 Fc with an affinity constant of 0.08 μM as determined in a BLI assay.



Captured FCGRT & B2M Heterodimer Protein, Human, Recombinant (His) on Anti-His Chip can bind Bevacizumab (IgG1) with an affinity constant of 0.11 μM as determined in an SPR assay.



Catalog No.	Protein Name	Species	Expression Systems	Tags	Purity	Bioactivity
TMPY-02082	FcRn & B2M	Human	HEK293	His	>95%	ELISA/SPR/BLI
TMPY-00716	FcαRI/CD89	Human	HEK293	His	⩾97%	Testing in progress
TMPY-04261	FcγRI/CD64	Human	HEK293	His	>95%	ELISA/SPR/BLI
TMPY-01968	FcγRIIa/CD32a	Human	HEK293	His	>95%	SPR/BLI
TMPY-00765	FcγRIIb/CD32b	Human	HEK293	His	⩾95%	ELISA
TMPY-01834	FcγRIII/CD16	Mouse	HEK293	His	⩾95%	ELISA/BLI
TMPY-01964	FcγRIIIa/CD16a	Human	HEK293	His	>95%	ELISA/SPR/BLI
TMPY-00701	FcγRIIIb/CD16b	Human	HEK293	His	>95%	SPR/BLI
TMPY-01087	FcγRIV	Mouse	HEK293	His	>95%	ELISA/BLI
TMPY-05084	FcεRI	Human	HEK293	Tag Free	⩾95%	Testing in progress
TMPY-02293	FcεRII/CD23	Human	HEK293	His	>96%	Testing in progress

Receptor Proteins

Receptor proteins are located on the cell surface or within cells and responsible for receiving and responding to external signals. These signals typically come from extracellular molecules such as hormones, neurotransmitters, cytokines, growth factors, and others. By binding to these signaling molecules, receptor proteins can activate or inhibit intracellular signaling pathways, thereby influencing cellular behaviors such as proliferation, differentiation, migration, and cell death [9][10].

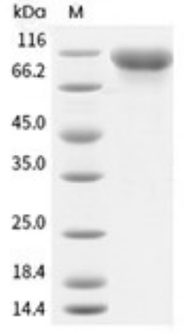
TargetMol offers a range of high-purity, low-endotoxin receptor proteins, including cytokine and growth factor receptors, G protein-coupled receptors (GPCRs), nuclear receptors, adhesion receptors, and enzyme-linked receptors. These receptors can serve as potential drug targets. These products are ideal for drug development and protein-protein interaction studies.

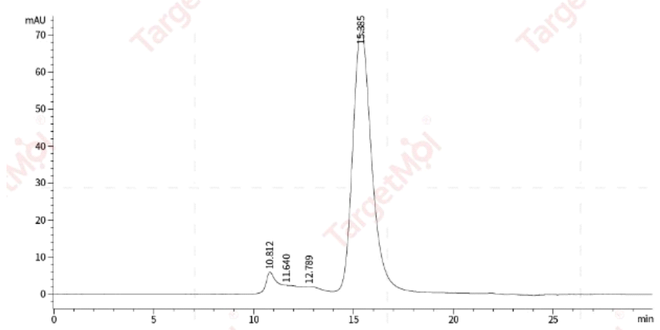
Product Data

EGFR Protein, Human, Recombinant (His) TMPY-00742

High Purity: validated by SDS-PAGE and SEC-HPLC

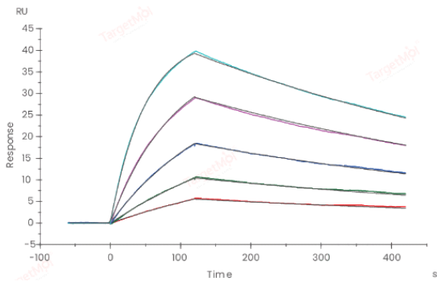
The purity of EGFR Protein, Human, Recombinant (His) (TMPY-00742) was >95% as determined by SDS-PAGE and >90% as determined by SEC-HPLC.



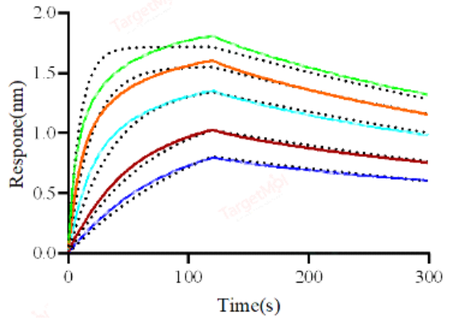


Binding: validated by SPR and BLI

Captured Cetuximab (IgG1) on proA Chip can bind EGFR Protein, Human, Recombinant (His) with an affinity constant of 1.07 nM as determined in an SPR assay.



Loaded Cetuximab on ProA Biosensor, can bind EGFR Protein, Human, Recombinant (His) with an affinity constant of 5.81 nM as determined in BLI assay.



Catalog No.	Protein Name	Species	Expression Systems	Tags	Purity	Endotoxin
TMPY-01447	ACVR2A	Mouse	HEK293	His	⩾97%	<1.0 EU/μg
TMPY-02052	CD32B	Rat	HEK293	His	>97%	<1.0 EU/μg
TMPY-05957	CD40	Mouse	HEK293	His	⩾95%	<1.0 EU/μg
TMPY-00742	EGFR	Human	HEK293	His	>95%	<1.0 EU/μg
TMPY-03299	FLT1	Rat	HEK293	His	>90%	<1.0 EU/μg
TMPY-01137	HER2	Human	HEK293	His	>90%	<1.0 EU/μg
TMPY-00634	HGFR	Cynomolgus,Rhesus	HEK293	Tag Free	>90%	<1.0 EU/μg
TMPY-04187	IL-6R	Rat	HEK293	hFc	>90%	<1.0 EU/μg
TMPY-01084	TrkA	Human	HEK293	His	⩾98%	<1.0 EU/μg
TMPY-00751	TrkB	Human	HEK293	His	⩾97%	<1.0 EU/μg
TMPY-02361	VEGFR2	Human	HEK293	His	>95%	<1.0 EU/μg
TMPY-03219	VISTA	Human	HEK293	His	>95%	<1.0 EU/μg

CD proteins

CD proteins are cell surface molecules in the immune system, crucial for cell-to-cell communication and sensing the microenvironment. They are important markers for identifying and isolating white blood cells and their subsets. CD proteins play significant roles in cell recognition and signal transduction, cell adhesion, immune regulation, and antigen presentation[11][12].

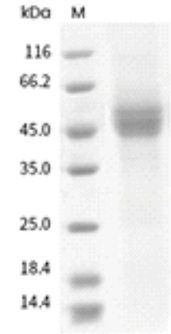
TargetMol offers a wide range of high-purity, highly bioactive CD proteins, covering various popular drug targets to meet the diverse needs of experimental applications.

Product Data

CD19 Protein, Human, Recombinant (His) (TMPY-01949)

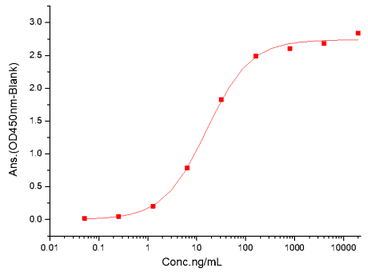
High Purity

The purity of CD19 Protein, Human, Recombinant (His) (TMPY-01949) was >90% as determined by SDS-PAGE.



Binding

Immobilized CD19 Protein, Human, Recombinant (His) at 2 μg/mL (100 μL/well) can bind Monoclonal Anti-Human CD19 Antibody (IgG1), the EC_{50} is 8-24 ng/mL.



Catalog No.	Protein Name	Species	Expression Systems	Tags	Purity	Bioactivity
TMPY-01253	CD107a/LAMP1	Human	HEK293	His	⩾95%	Testing in progress
TMPY-00881	CD115/CSF1R	Human	HEK293	Tag Free	>90%	ELISA/Cell
TMPY-00758	CD13/ANPEP	Mouse	HEK293	His	>97%	Enzyme
TMPY-01949	CD19	Human	HEK293	His	>90%	ELISA
TMPK-00183	CD20	Human	E. coli	His&Avi	>95%	ELISA
TMPY-00962	CD292/ALK-3	Mouse	HEK293	His&hFc	>95%	Cell
TMPY-00706	CD31/PECAM-1	Human	HEK293	hFc	>90%	Cell
TMPY-01445	CD36	Mouse	HEK293	His	>92%	ELISA
TMPY-02501	CD3D&CD3E	Human	HEK293	Tag Free	⩾90%	ELISA
TMPK-00281	CD4	Human	HEK293	His&Avi	>95%	ELISA
TMPK-00518	CD44	Cynomolgus	HEK293	His	>95%	ELISA
TMPY-03093	CD47	Rat	HEK293	His	>90%	ELISA
TMPY-01349	CD54/ICAM-1	Mouse	HEK293	His	>95%	Cell
TMPY-03094	CD68	Rat	HEK293	His	>95%	Testing in progress
TMPY-06274	CD8 alpha	Human	CHO	His	>90%	ELISA

Enzymes

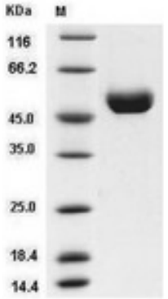
Enzymes are crucial proteins in living organisms that catalyze various biochemical reactions, thereby accelerating the rate of chemical reactions. They are characterized by their high efficiency, specificity, and dependence on temperature and pH. As key catalysts in biochemical processes, enzymes are essential for all aspects of life [13].

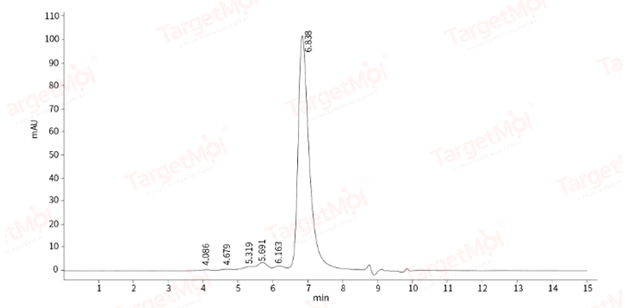
TargetMol offers a wide range of enzymes, including target enzymes, tool enzymes, nucleases, and more. Our products feature high purity, high enzyme activity, and species diversity, enhancing substrate catalytic efficiency and facilitating drug screening research.

Product Data

Cathepsin D Protein, Human, Recombinant (His) (TMPY-02450)

The purity of Cathepsin D Protein, Human, Recombinant (His) (TMPY-02450) was ≥97% as determined by SDS-PAGE and ≥90% as determined by SEC-HPLC.





Catalog No.	Protein Name	Species	Expression Systems	Tags	Purity
TMPY-00140	ABP1/AOC1	Human	HEK293	His	>90%
TMPK-00804	ALPG	Human	HEK293	mFc	>95%
TMPY-00446	ALPL	Mouse	HEK293	His	>95%
TMPY-00669	ARSA	Human	HEK293	His	>97%
TMPY-03262	B3GNT6	Human	Baculovirus-Insect Cells	His	>90%
TMPY-02963	Calcineurin A	Human	Baculovirus-Insect Cells	His	>94%
TMPY-00693	Carbonic Anhydrase 10	Human	HEK293	Tag Free	>95%
TMPY-00731	Cathepsin B	Human	HEK293	His	>97%
TMPY-02450	Cathepsin D	Human	HEK293	His	≥97%
TMPY-03377	Cd73	Human	HEK293	His	>95%

Catalog No.	Protein Name	Species	Expression Systems	Tags	Purity
TMPY-05346	CRISPR-Cas9	Streptococcus pyogenes	Baculovirus-Insect Cells	His	≥90%
TMPY-02546	FUT8	Human	Baculovirus-Insect Cells	His	>95%
TMPY-02317	HDAC8	Mouse	Baculovirus-Insect Cells	His	>90%
TMPY-02198	ILKAP	Human	HEK293	His	>92%
TMPY-01248	MMP-9	Human	HEK293	Tag Free	≥90%
TMPY-01336	REG3A	Human	HEK293	His	>97%
TMPY-01090	REG3A	Mouse	HEK293	His	>95%
TMPY-02685	ST6GALNAC2	Mouse	HEK293	His	>98%

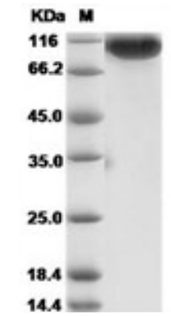
Viral Proteins

Viral proteins are key components of virus particles with various biological functions such as providing structural support, invading host cells, replicating viral genetic material, and regulating host cell functions. Viral proteins can interact with host proteins, and these interactions are crucial for the virus's survival and replication [14].

TargetMol offers a diverse range of viral proteins, including proteins from SARS-CoV-2, coronaviruses, influenza viruses, human immunodeficiency viruses, Ebola viruses, respiratory syncytial viruses, and more. Our collection includes various mutants and can be utilized in research for antiviral drug discovery, vaccine development, and diagnostic reagent development.

Product Data

MERS-CoV Spike/S1 Protein (aa 1-725, His) (TMPY-03574)

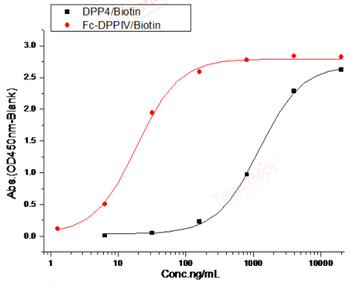


High Purity

The purity of MERS-CoV Spike/S1 Protein (aa 1-725, His) (TMPY-03574) was >95% as determined by SDS-PAGE.

Binding

Immobilized MERS-CoV Spike/S1 Protein (aa 1-725, His) at 2 μg/mL (100 μL/well) can bind biotinylated Fc-DPP4. The EC_{50} of biotinylated Fc-DPP4 is 15-60 ng/mL.



Catalog No.	Protein Name	Species	Expression Systems	Tags	Mutation Site
TMPJ-01449	3CLpro/3C-like	SARS-CoV-2	E. coli	Tag Free	/
TMPK-01342	3CLpro/3C-like	SARS-CoV-2	E. coli	Tag Free	A191V
TMPK-01347	3CLpro/3C-like	SARS-CoV-2	E. coli	Tag Free	E166A
TMPY-00296	E2	HCV	HEK293	His	/
TMPY-01078	Fusion glycoprotein	RSV	Baculovirus-Insect Cells	His	/
TMPY-00038	Glycoprotein/GP	EBOV	Baculovirus-Insect Cells	His	/
TMPY-01373	gp120	HIV	HEK293	His	/
TMPY-01524	Hemagglutinin/HA	H3N2	HEK293	His	/
TMPY-05517	Hemagglutinin/HA, Biotinylated	H1N1	HEK293	His	/
TMPY-05664	Nucleocapsid	SARS-CoV-2	Baculovirus-Insect Cells	Tag Free	/
TMPY-06189	Nucleocapsid	SARS-CoV-2	E. coli	His	A220V
TMPY-06097	Nucleocapsid	SARS-CoV-2	E. coli	Tag Free	S194L
TMPY-06096	Nucleocapsid	SARS-CoV-2	E. coli	Tag Free	P13L
TMPY-06221	Nucleocapsid	SARS-CoV-2	E. coli	His	P67S
TMPY-06145	Nucleocapsid	SARS-CoV-2	E. coli	His	E378Q
TMPK-01384	PLpro	SARS	E. coli	His	/
TMPY-00402	Spike/RBD	MERS-CoV	Baculovirus-Insect Cells	His	/
TMPY-03574	Spike/S1	MERS-CoV	HEK293	His	/
TMPY-03512	Spike/S2	MERS-CoV	Baculovirus-Insect Cells	His	/

MHC Series Proteins

The Major Histocompatibility Complex (MHC) is a group of proteins located on the cell surface whose primary function is to present antigen fragments to T cells. This process is crucial for the immune system to recognize and eliminate infections. MHC is divided into two classes:

MHC I Molecules: Present on the surface of almost all nucleated cells. They present fragments of internally produced proteins (such as viral or tumor proteins) to CD8+ T cells (cytotoxic T cells). This helps the immune system detect and destroy infected or cancerous cells.

MHC II Molecules: Primarily expressed on professional antigen-presenting cells of the immune system, such as dendritic cells, macrophages, and B cells. They present antigen fragments from the extracellular environment to CD4+ T cells (helper T cells), thereby initiating and regulating the immune response[15].

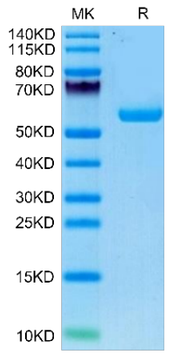
TargetMol offers MHC peptide complexes covering popular targets such as NY-ESO-1, KRAS, AFP, and HPV16. These are available in different complex forms, including monomers, tetramers, and species chimeras. We also provide Peptide Ready MHC products that allow for the ready-to-use loading of peptides, making the process simple and convenient. These products are useful for research in cell sorting, antibody screening, and TCR affinity validation.

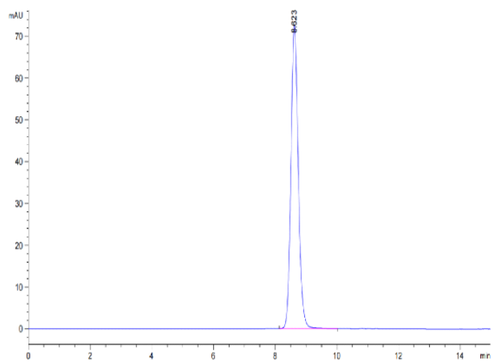
Product Data

HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer Protein, Human, MHC (His & Avi) (TMPK-01515)

High Purity: validated by Tris-Bis PAGE and HPLC

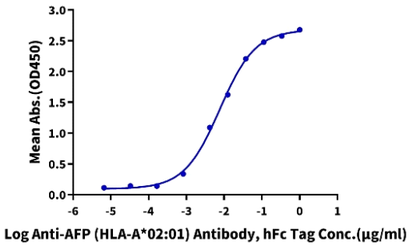
The purity of HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer Protein, Human, MHC (His & Avi) (TMPK-01515) was >95% as determined by Tris-Bis PAGE and >95% as determined by HPLC.



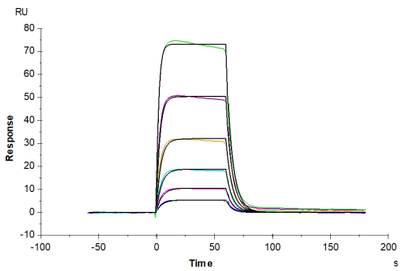


Binding: validated by ELISA and SPR

Immobilized HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer Protein, Human, MHC (His & Avi) at 2 μg/mL (100 μL/well) on the plate. Dose response curve for Anti-HLA-A*02:01&B2M&AFP (FMNKFIYEI) Antibody, hFc Tag with the EC_{50} of 7.6 ng/mL as determined by ELISA.



HLA-A*02:01&B2M&AFP (FMNKFIYEI) Monomer Protein, Human, MHC (His & Avi) captured on CM5 Chip via Anti-His Antibody can bind HLA-A*02:01&B2M&AFP (FMNKFIYEI) TCR with an affinity constant of 0.923 μM as determined in SPR assay.



Catalog No.	Genotype	Form	Species	Expression Systems
TMPK-01515	HLA-A*02:01&B2M&AFP (FMNKFIYEI)	Monomer	Human	HEK293
TMPK-01519	HLA-A*02:01&B2M&AFP (FMNKFIYEI)	Tetramer	Human	HEK293
TMPK-01551	HLA-A*02:01&B2M&GP100 (YLEPGPVTA)	Monomer	Human	HEK293
TMPK-01540	HLA-A*02:01&B2M&GP100 (YLEPGPVTA)	Tetramer	Human	HEK293
TMPK-01543	HLA-A*02:01&B2M&NY-ESO-1 (SLLMWITQC)	Monomer	Human	HEK293
TMPK-01539	HLA-A*02:01&B2M&NY-ESO-1 (SLLMWITQC)	Monomer, Biotinylated	Human	HEK293
TMPK-01546	HLA-A*02:01&B2M&NY-ESO-1 (SLLMWITQC)	Tetramer	Human	HEK293
TMPK-01426	HLA-A*11:01&B2M	Monomer	Human	HEK293
TMPK-01425	HLA-A*11:01&B2M	Monomer, Biotinylated	Human	HEK293
TMPK-01422	HLA-A*02:01&B2M	Monomer	Human	HEK293
TMPK-01410	HLA-A*24:02&B2M	Monomer	Human	HEK293
TMPK-01418	HLA-G&B2M	Monomer	Human	HEK293

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