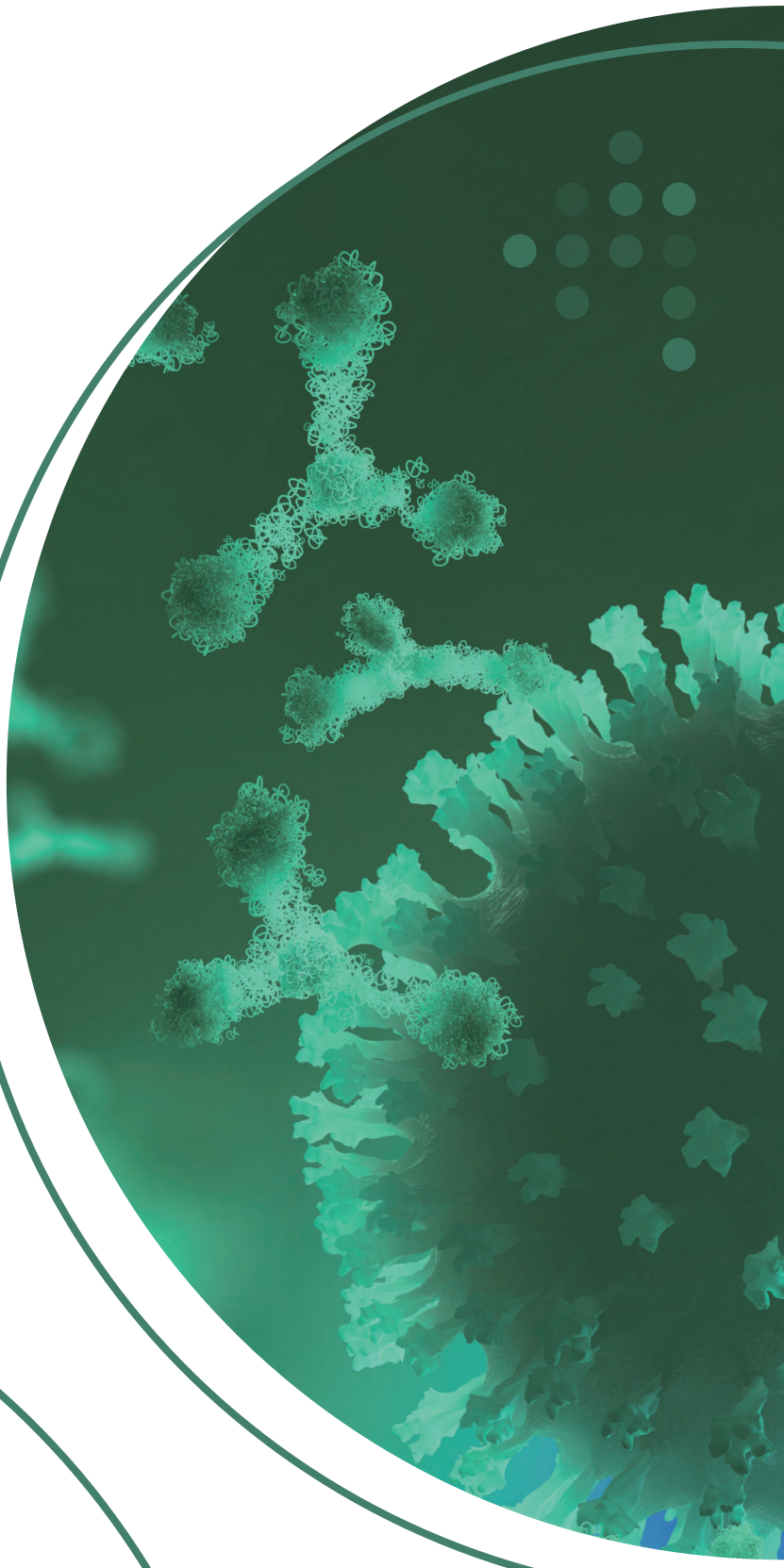
Sino Biological

Drug Target Reagents

Support Drug Discovery & Development



5,000+ Recombinant Proteins for Targeted Biotherapeutics

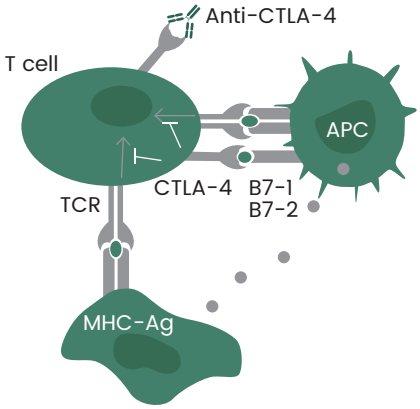
Immune Checkpoints	Proteases	Epigenetic enzymes
Cell therapy targets	Influenza viral enzymes	GPCRs
Cytokines	HIV viral enzymes	Nuclear receptors
CDs	HCV viral enzymes	Ion channels
Kinases	SARS-CoV-2	

Multiple Therapeutic Areas

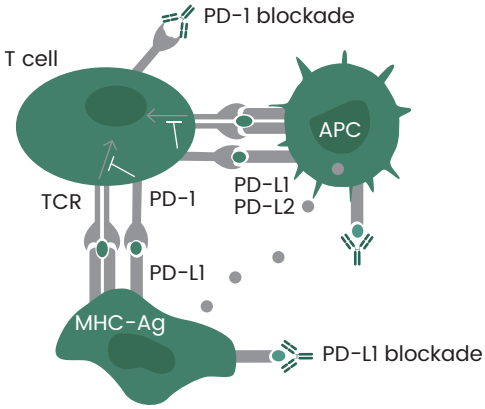
Oncology	Respiratory diseases	Autoimmune diseases
Neurological diseases	Inflammatory diseases	Endocrine & Metabolic diseases
Cardiovascular diseases	Osteoporosis	Cerebrovascular diseases
Injuries & Wound repairs	Infective diseases	Transplant rejections
Digestive diseases		

5,000+ Customers Worldwide

Immune Checkpoint Related Reagents



Anti-CTLA-4 therapy



Blockade of PD-L1/PD-1 pathway

Protein Molecules (Partial)

PDCD1	PD-L1	PD-L2	TIGIT	CD155/PVR	PVRIG	PVRL1/NECTIN1
Nectin-2	Nectin 3	NECTIN4/Nectin 4	CD96	CD226	CD137	4-1BBL/TNFSF9
CTLA-4	CD28	B7-1	CD86	CEACAM1	CEACAM3	CEACAM5
CEACAM6	CD66b	LAG3	CD47	SIRP alpha	SIRP gamma/SIRPG	CD40 Ligand
CD40	OX40	OX40L/TNFSF4	B7-H3	B7-H3(4ig)	B7-H4	VISTA
B7-H6	HHLA2	NKp44/NCR2	NKp30/NCR3	TMIGD2	LILRA1/LIR-6/CD85i	LILRA2
LILRA3	LILRA4/CD85g	LILRA5	LILRA6	LILRB1	ILT4	LILRB3
ILT3	LILRB5/CD85c	TIM-3	CD30/TNFRSF8	CD30L	ICOS	ICOS ligand
CD70	CD27	TNFSF18	GITR	LIGHT	CD160	BTLA
HVEM	SLAM/CD150	CD48	CD229	2B4/CD244	CD84	SLAMF6
SLAMF7/CD319	LAIR1	LAIR2	SIGLEC5	CD22	CD33	SIGLEC6
SIGLEC10	SIGLEC15	BTN3A1	BTN3A3	HMGB1	RAGE	NKG2A
NKG2D	KIR2DL1	KIR2DL3	KIR2DL4	KIR2DL5	KIR3DL3	MICA
MICB	DR3					

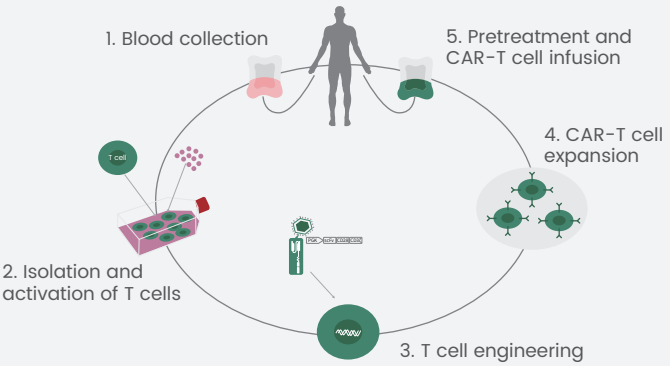
Neutralizing Antibodies

Species	Molecule	Application	Cat#
Human	PD1	Neutralization, Block	10377-HN94
Human	PD1	Neutralization, Block	10377-HF06
Human	PD1	Block	10377-mhT28
Human	PD-L1	Block	10084-R639

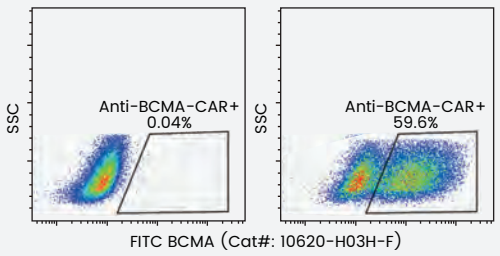
Effect of Human PD1 antibody (Cat#: 10377-HN94) on IFN-gamma and IL2 production in the Mixed Lymphocyte Reaction (MLR).

CAR-T Cell Therapy Related Reagents

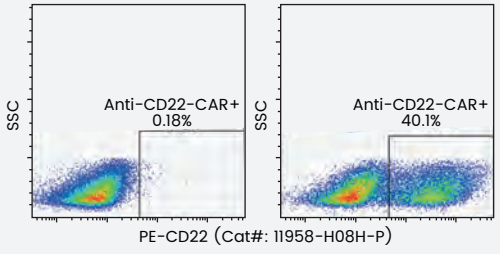
Chimeric Antigen Receptor T cell therapy, or CAR-T cell therapy, has been widely used in the field of cancer immunotherapy.



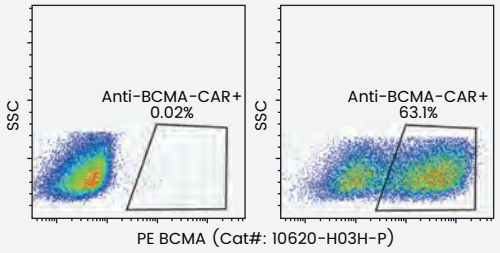
Bioactivity Validated by FACS



293 cells were lentivirally transduced with anti-BCMA CAR. Flow cytometric analysis was performed with FITC-conjugated recombinant human BCMA. Non-transduced 293 cells were used as a control (left).



Human T cells were lentivirally transduced with anti-CD22 CAR. Flow cytometric analysis was performed with PE-conjugated recombinant human CD22. Non-transduced T cells were used as a control (left).



293 cells were lentivirally transduced with anti-BCMA CAR. Flow cytometric analysis was performed with PE-conjugated recombinant human BCMA. Non-transduced 293 cells were used as a control (left).

Conjugated Proteins (Partial)

Molecule	Conjugation
BCMA	PE/FITC/Biotinylated
CD22	PE/Biotinylated
CD33	PE/FITC/Biotinylated
CD38	PE/FITC/Biotinylated
ROR1	Biotinylated
EpCAM	Biotinylated
EGFR	Biotinylated
Her2/ERBB2	Biotinylated
VEGFR2/KDR	Biotinylated
ULBP1	Biotinylated
ULBP2	Biotinylated

More Targets

CD19	PD-L1	CD30/TNFRSF8
BCMA	CEACAM5	FAP
CD22	FOLR1	IL3RA
CD33	PD-1	NCAM
CD38	EGFR	ULBP1
Glypican 3	Her2/ERBB2	c-MET
ROR1	VEGFR2/KDR	ULBP2
EpCAM	MUC1	EphA2
Mesothelin	CD70	PSMA
CD20	Syndecan-1/CD138	L1CAM
CD5	Carbonic Anhydrase IX	IL13RA2
CD7	IL1RAP/IL-1RAcP	

Flow Cytometry (FACS) Antibodies

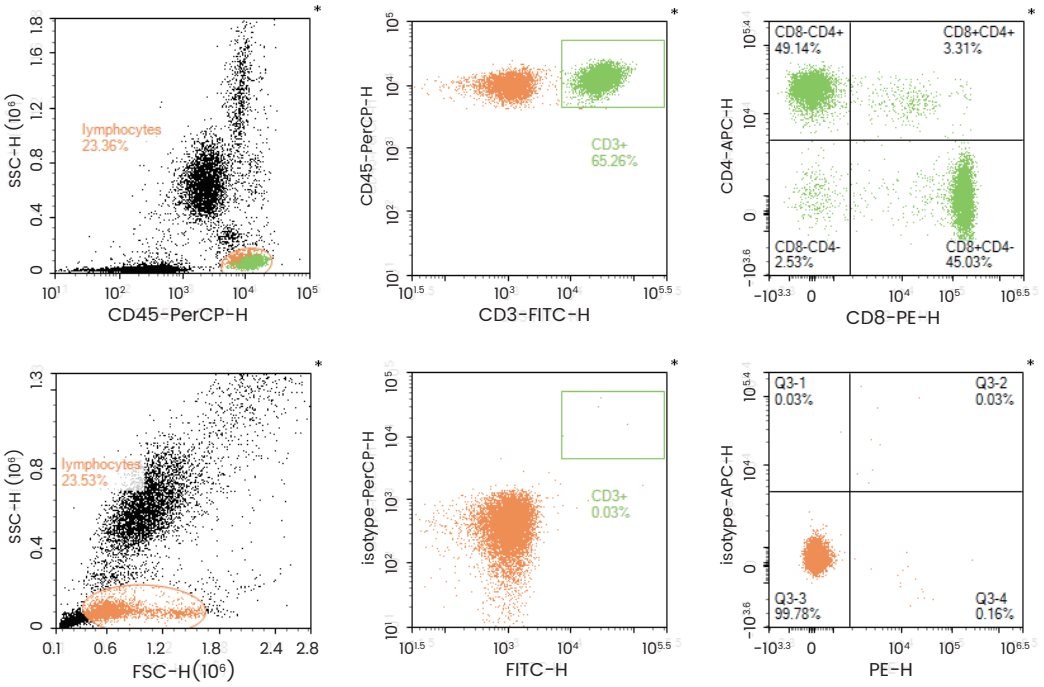
T cell: CD3, CD4, CD8, CD45

Target	Conjugate	Cat#
CD45	PerCP	10086-MM05-C
CD3	FITC	CT026-R301-F
CD4	APC	10400-MM08-A
CD8	PE	10980-MM48-P
Mouse IgG1 isotype	PerCP	
Mouse IgG1 isotype	APC	

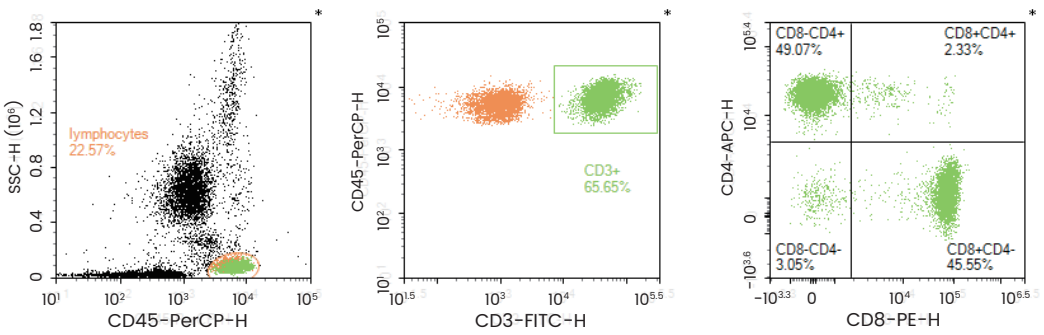
Notes: More FACS Antibodies, please visit www.sinobiological.com

The FACS antibodies target CD3/CD4/CD8/CD45 are used to identify the percentage and absolute count of human mature T lymphocyte (CD3+) and inhibitory/cytotoxic (CD3+CD8+) T lymphocyte subsets in whole blood.

Sino Biological Inc.



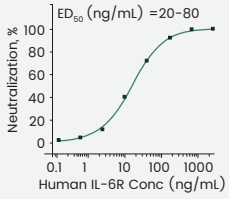
Other Commercial Brand



Cytokine

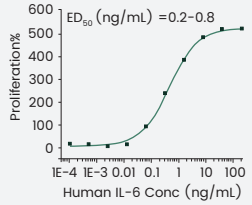
Bioactivity Validated by Cell Based Assay

● Cat#: 10398-H08H



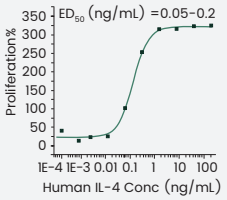
Measured by its ability to enhance the IL6 activity on M1 mouse myeloid leukemia cells.

● Cat#: 10395-HNAE



Measured in a cell proliferation assay using TF-1 human erythroleukemic cells.

● Cat#: 11846-HNAE



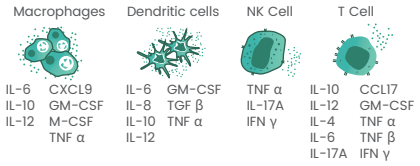
Measured in a cell proliferation assay using TF-1 human erythroleukemic cells.

○ Protein Molecules (Partial)

GDF-8	GM-CSF	HGF	IGF1	IGF-II	VEGFA	IL-1 beta	IL-15	TGF beta 1	CD122/IL2RB	IL7R alpha/CD127
IL17F	IL17RA	IL-18	IL18R1	IL2	IL21	IL3	IL-4	TNF beta	CD25/IL2RA	Interferon Gamma
IL-6	IL-6R	IL-7	M-CSF	NGF	RSPO1	IL4R	IL17	TNF-alpha	IL-1 alpha	

ELISA Kits for Cytokine Detection

Based on the well-established recombinant protein platform, antibody technology platform, and QC platform, Sino Biological Inc. has developed a variety of ELISA Kits for the quantitative detection of cytokines, which can be used to accurately quantify cytokines in plasma, serum, cell culture supernatant, and other biological samples.



○ 8 International QC Test Indicators for High-quality ELISA Kits

Detection limit	Precision	Recovery	Linearity	Stability	Natural sample test	Cross-reactivity	Interference
Evaluate the sensitivity	Evaluate the repeated experimental errors	Evaluate the accuracy	Evaluate the accuracy	Evaluate the validity period	Natural samples	Evaluate the Specificity	Analyze the interference to results

○ ELISA Kits —Ready to Use

Species	Target	Cat#	Linear range(pg/ml)	Sample
Mouse	IL1A	KIT50114	6.56-420	S, C
Human	IL2	KIT11848	18.75-1200	S, C, P
Human	IL4	KIT11846	10.94-700	C
Human	IL5	KIT15673	4.69-300	C
Human	IL6	KIT10395A	5.47-350	S, C
Human	IL8	KIT10098	2.5-160	C
Human	IL10	KIT10947A	18.75-1200	C
Human	TNFα	KIT10602	31.25-2000	C
Human	IFNγ	KIT11725A	23.44-1500	C

Notes: S (Serum); C (Cell culture supernatant); P (Plasma)

○ ELISA Pair Sets —Cost effective

Species	Target	Cat#	Linear range (pg/ml)
Mouse	IL1A	SEK50114	6.25-400
Human	IL1B	SEK10139	78.13-5000
Human	IL4	SEK11846	7.81-500
Human	IL5	SEKA15673	3.91-250
Human	IL6	SEKB10395	9.38-600
Human	IL8	SEK10098	11.72-750
Human	IL10	SEKA10947	14.06-900
Human	TNFα	SEKA10602	39.06-2500
Mouse	TNFα	SEK50349	31.25-2000
Ferret	TNFα	SEK60002	78.13-5000
Human	IFNγ	SEKA11725	21.88-1400

Notes: More ELISA Kits, please visit www.sinobiological.com

Neutralizing Antibodies

Species	Molecule	Application	Cat#
Human	TNF	FCM, Neutralization	10602-R10N1
Mouse	TNF	Neutralization	50349-RN023
Human	HGF	Neutralization	10463-mh010

Species	Molecule	Application	Cat#
Human	VEGFA	Neutralization	11066-R010
Human	IL17A	Neutralization	12047-M237
Human	TNFRSF1A	Neutralization	10872-R111

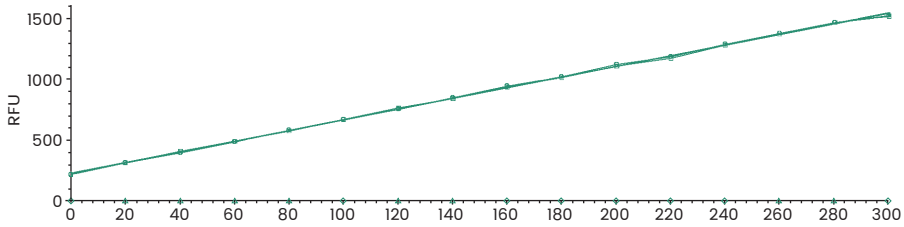
Target Protein with Enzymatic Activity

Kinases (Partial)

Molecule	Species	Bioactivity	Sequence
EGFR	Human	The specific activity was determined to be>70 nmol/min/mg using Poly (Glu, Tyr) 4:1 as the substrate	Met668-Ala1210
PDGFRA	Human	The specific activity was determined to be 8 nmol/min/mg using MBP as the substrate	Gln551-Leu1089
IGF1R	Human	The specific activity was determined to be 554 nmol/min/mg using Poly (Glu, Tyr) 4:1 as the substrate	Met954-Cys1367
EphA2	Human	The specific activity was determined to be 50 nmol/min/mg using Poly (Glu, Tyr) 4:1 as the substrate	Leu585-Ile976
VEGFR2/KDR	Human	The specific activity was determined to be 10 nmol/min/mg using Poly (Glu, Tyr) 4:1 as the substrate	Asp807-Val1356
ROR1	Human	The specific activity was determined to be 0.3 nmol/min/mg using MBP as the substrate	Met453-Asn783
c-MET	Human	The specific activity was determined to be 10 nmol/min/mg using MBP as the substrate	Lys956-Ser1390
FGFR2	Human	The specific activity was determined to be 28 nmol/min/mg using Poly (Glu, Tyr) 4:1 as the substrate	Met400-Thr821
CD45	Mouse	The specific activity was determined to be 12306 nmol/min/mg using p-nitrophenyl phosphate as the substrate	Arg453-Ser1152

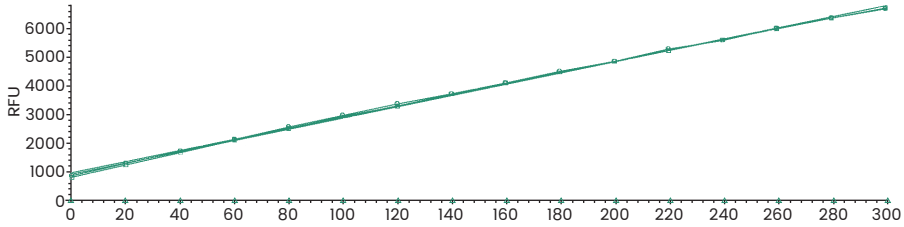
Other Enzymes

○ Recombinant Human FAP Protein (ECD, His Tag)



Cat#: **10464-H07H**
Measured by its ability to convert the substrate benzyloxycarbonyl-Gly-Pro-7-amido-4-methylcoumarin (Z-GP-AMC) to Z-Gly-Pro and 7-amino-4-methylcoumarin (AMC). The specific activity is >1,200 pmol/min/μg

○ Recombinant Human DPP4/CD26 Protein



Cat#: **10688-HNCH**
Measured by its ability to cleave the fluorogenic peptide substrate, Gly-Pro-7-amido-4-methylcoumarin (GP-AMC). The specific activity is >2,500 pmol/min/μg

Protein Molecules (Partial)

DPP4/CD26	Factor IX	ENTPD3	PRSS2	CD73	Carbonic Anhydrase IX
FAP	CD39	ADAM17	MMP-9	CD38	Chymotrypsin C
LOXL2	PRSS3	Kallikrein 8	Cathepsin B	Cathepsin S	ADAM8/CD156a

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