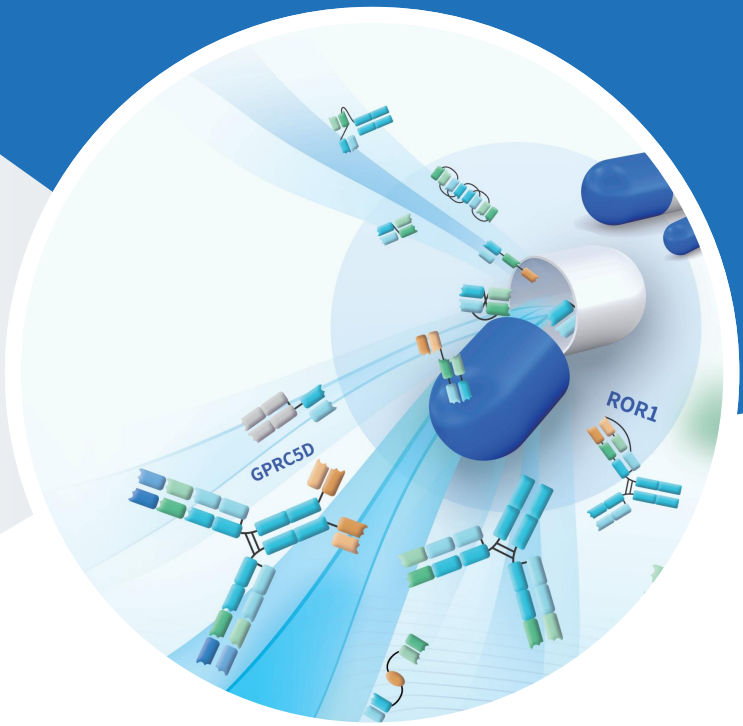
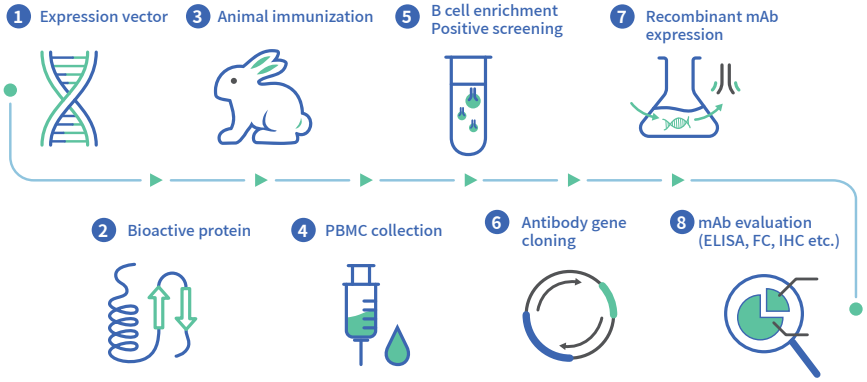


DIMA BIOTECH
Recombinant mAbs and proteins

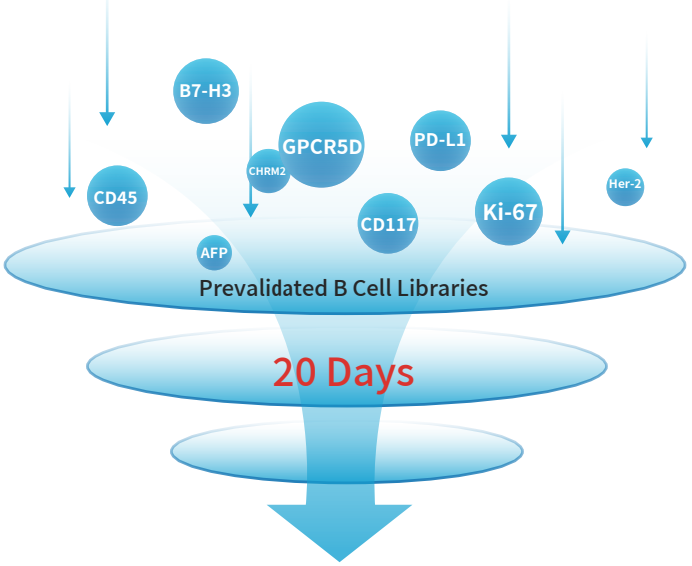
DIMA Highlights

Innovations in Therapeutic Antibody Discovery and Functional Membrane Protein Production

DIMA Single B mAb Development Platform



Pre-validated B Cell Libraries for Drug Targets



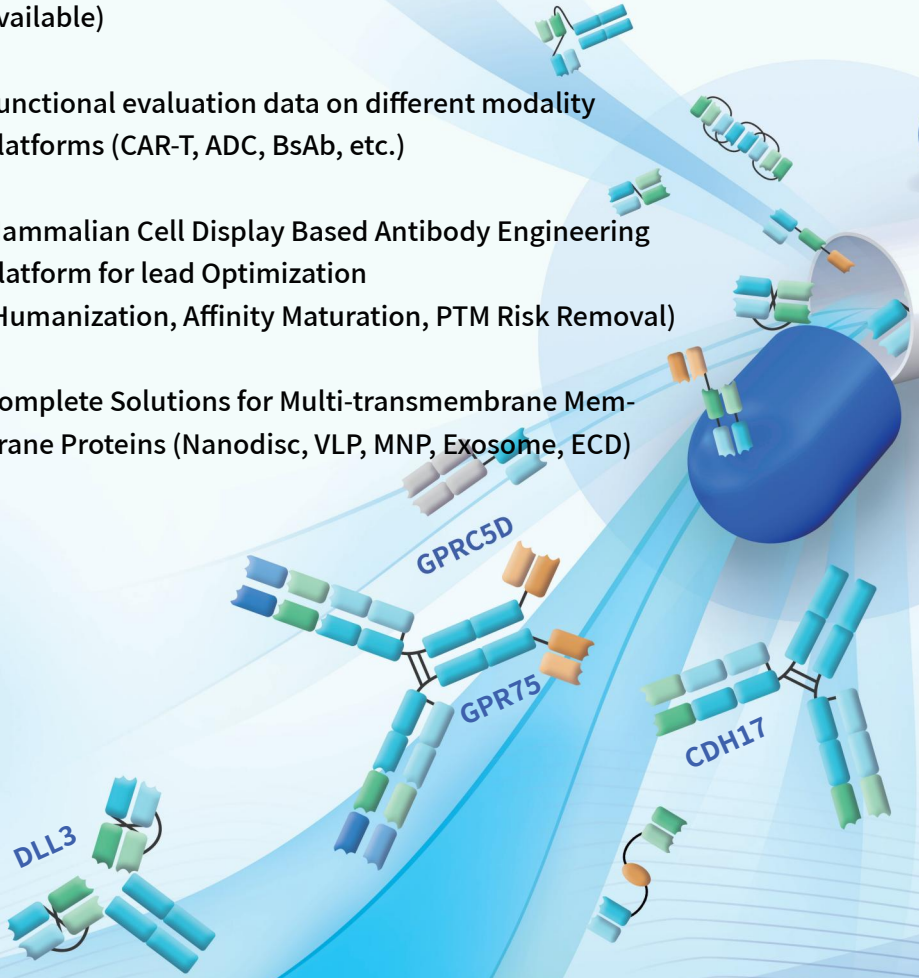
1. High Efficiency: Obtain up to 10,000 positive IgG sequences from each immunized rabbit.
2. High Diversity: Immunize a minimum of 5 rabbits for each drug target to ensure IgG sequence diversity.
3. High Speed: Obtain validated IgG sequences in as little as 20 days.

5000+ Prevalidated IgG Sequences with Global Licensing Options

500+ Druggable Targets

0 Upfront **0 Waiting** **0 Risk**

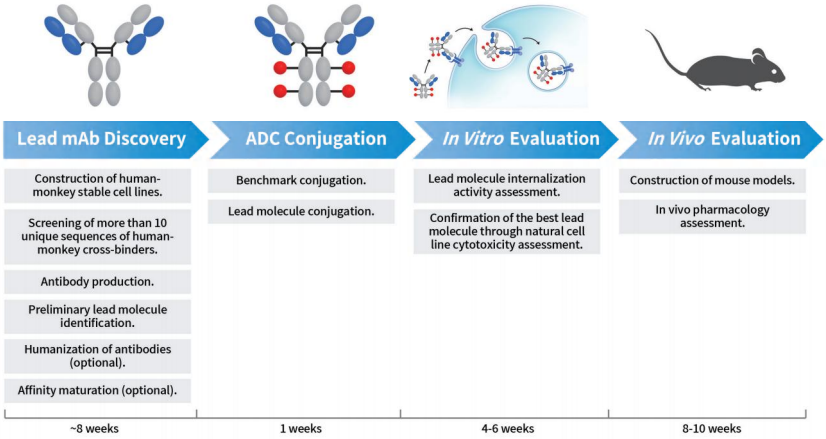
- Immediate Testing (Pre-clinical Validation Data Package available)
- Functional evaluation data on different modality platforms (CAR-T, ADC, BsAb, etc.)
- Mammalian Cell Display Based Antibody Engineering Platform for lead Optimization (Humanization, Affinity Maturation, PTM Risk Removal)
- Complete Solutions for Multi-transmembrane Membrane Proteins (Nanodisc, VLP, MNP, Exosome, ECD)



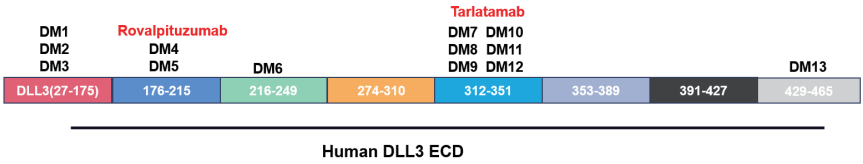
Discovery of ADC Lead Molecules

- Off-the-shelf Proteins & Lead mAbs
- Prevalidated B Cell Libraries
- Anti-payload and Anti-linker mAbs
- Antibody Internalization Assays
- Custom ADC Projects

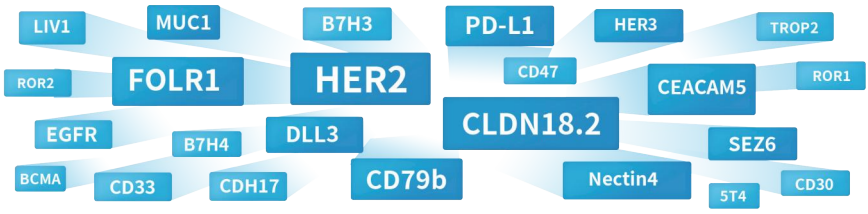
Discovery of ADC Lead Molecules



Lead molecule antigenic epitope analysis



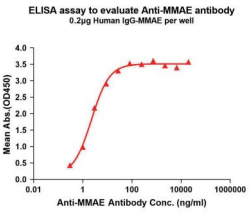
Hot pre-validated Lead mAbs against ADC Targets



Anti-Payload/Linker Rabbit mAb

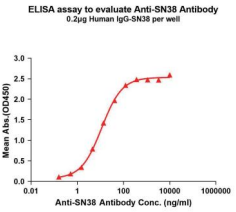
Target	sku	Product name
MMAE	DME101003	Anti-MMAE antibody(8B4); Rabbit mAb
MMAE	DME101004	Anti-MMAE antibody(8C4); Rabbit mAb
MMAE	DME101005	Anti-MMAE antibody(9C4); Rabbit mAb
MMAE	DME101006	Anti-MMAE antibody(11B2); Rabbit mAb
MMAE	DME101007	Anti-MMAE antibody(11C8); Rabbit mAb
SN38	DME101020	Anti-SN38 antibody(1G1); Rabbit mAb
Dxd	DME101024	Anti-Dxd antibody(1A1); Rabbit mAb
Dxd	DME101025	Anti-Dxd antibody(1A5); Rabbit mAb
Dxd	DME101026	Anti-Dxd antibody(1A12); Rabbit mAb
Dxd	DME101027	Anti-Dxd antibody(1E6); Rabbit mAb
Eribulin	DME101047	Anti-Eribulin antibody(2E4); Rabbit mAb
Eribulin	DME101048	Anti-Eribulin antibody(3E2); Rabbit mAb
Eribulin	DME101049	Anti-Eribulin antibody(3G1); Rabbit mAb
Eribulin	DME101050	Anti-Eribulin antibody(3G5); Rabbit mAb
DM1	DME101062	Anti-DM1 antibody(14E3); Rabbit mAb
CL2A	DME101021	Anti-CL2A(ADC linker) antibody(1H6); Rabbit mAb
CL2A	DME101022	Anti-CL2A(ADC linker) antibody(1G9); Rabbit mAb
CL2A	DME101023	Anti-CL2A(ADC linker) antibody(1H2); Rabbit mAb

MMAE



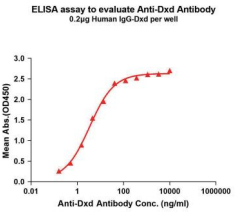
EC50 of anti-MMAE mAb binding to IgG-MMAE: 2.274 ng/mL.

SN38



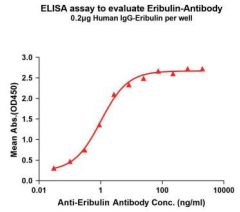
EC50 of anti-SN38 mAb binding to IgG-SN38: 11.39 ng/mL.

Dxd



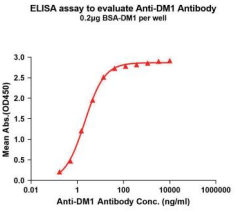
EC50 of anti-Dxd mAb binding to IgG-Dxd: 3.447 ng/mL.

Eribulin



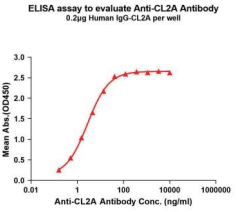
EC50 of anti-Eribulin mAb binding to IgG-Eribulin: 1.012 ng/mL.

DM1



EC50 of anti-DM1 mAb binding to BSA-DM1: 2.110 ng/mL.

CL2A (ADC linker)

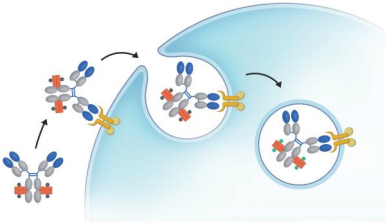


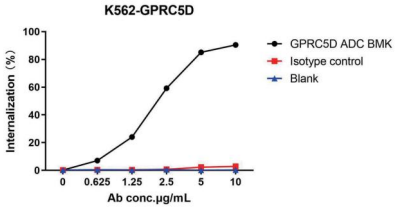
EC50 of anti-CL2A mAb binding to IgG-CL2A: 2.801 ng/mL.

DiTag™ IgG labeling reagents

Catalog No.	Product Description
AME100001	DiTag™ pH sensitive IgG labeling reagent
AME100002	DiTag™ pH sensitive IgG labeling reagent plus
AME100003	DiTag™ MMAE IgG labeling reagent

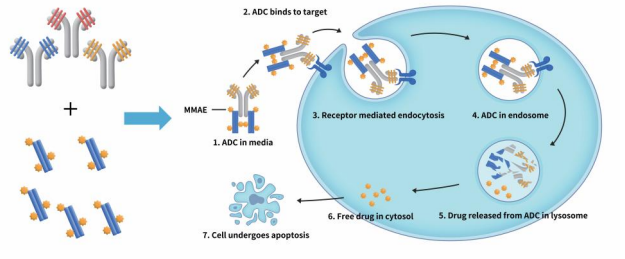
pH-Sensitive lgG Labeling Reagents

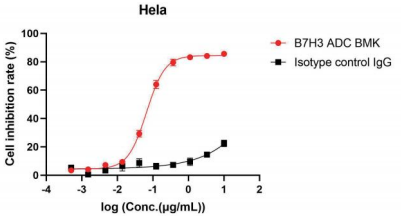




The fluorescent signal from GPRC5D ADC BMK-AME100002 conjugate is only detected in GPRC5D positive cells (K562-GPRC5D stable expression cell line), indicating specific internalization.

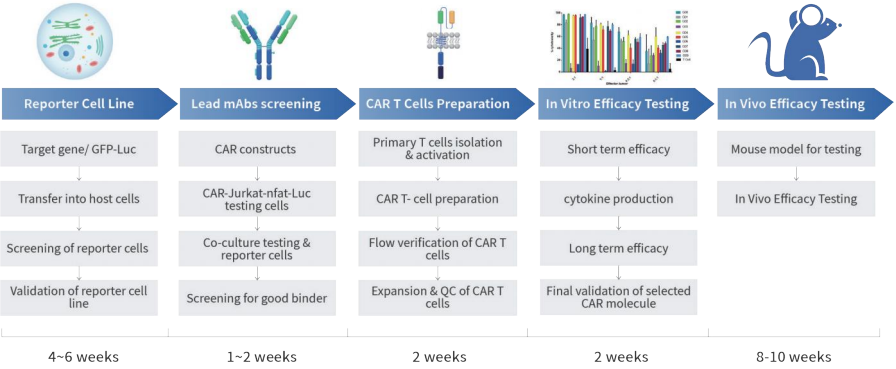
Payload Conjugated lgG Labeling Reagents

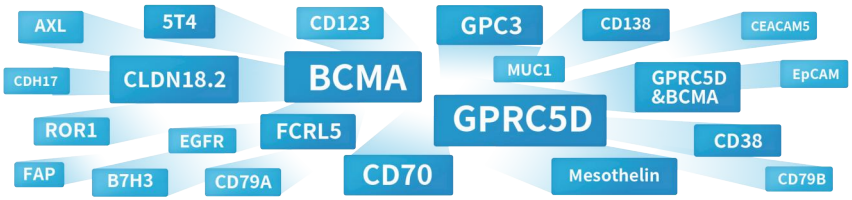


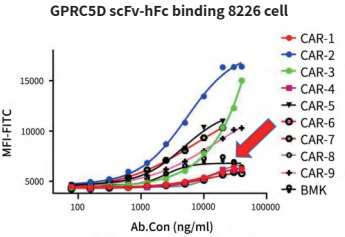


Cell inhibition detected by CCK8 method. B7H3 ADC is labeled with DiTag™ MMAE IgG labeling reagent (Cat. No. AME100003)

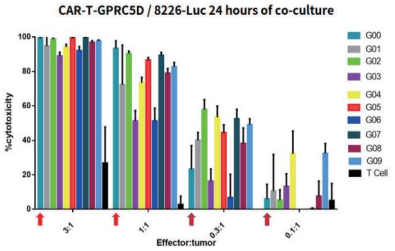
Discovery of CAR-T Lead Molecules



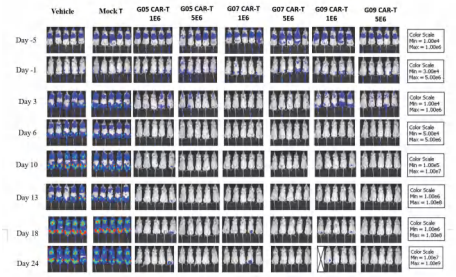




The samples marked with red arrows correspond to the reference CAR (BMK).

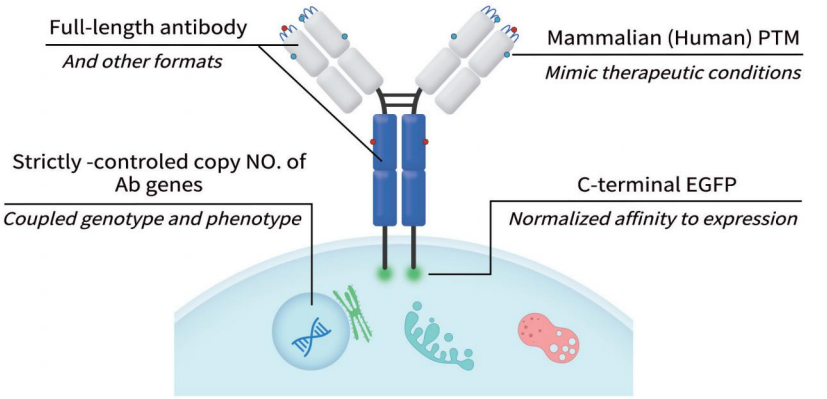


In vivo efficacy evaluation of the NSG mouse multiple myeloma model.

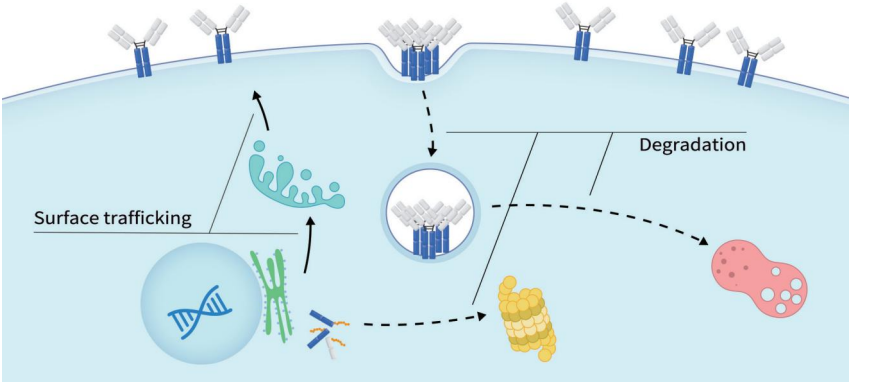


DiLibrary™: Mammalian Cell Display Based Antibody Engineering Technology

1. The design:

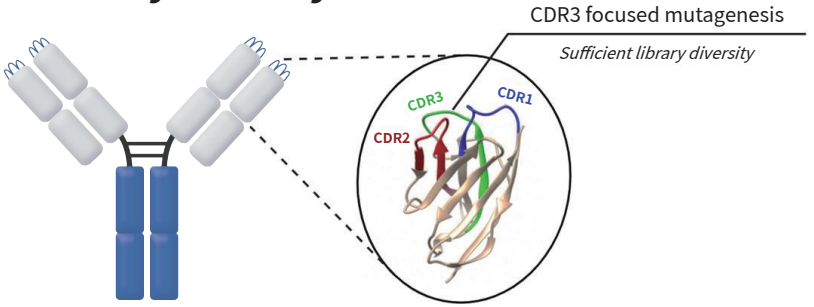


2. A natural screening system to fish out molecules with better developability:

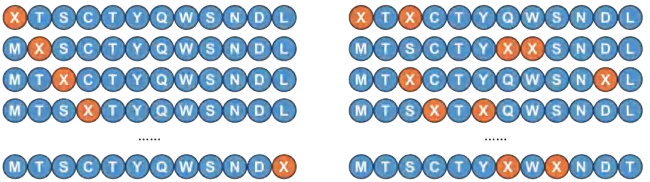


Structurally and chemically unstable molecules can be cleared out through mammalian cell internal quality control system.

DiLibrary™ applications: Antibody affinity maturation



AI optimized mutagenesis library

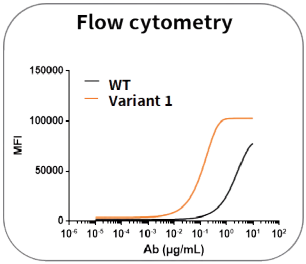


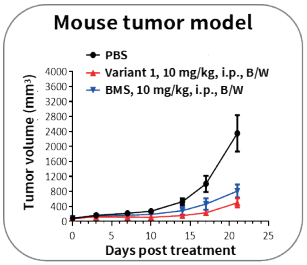
Case study:

Affinity maturation for CCR8 therapeutic antibody (WT)

		Ka(M-1s-1)	Kd(s-1)	KD(M)	Rmax(RU)	Chi2(RU2)
Human	WT	2.82E+05	1.49E-02	5.26E-08	24.5	0.3697
	Variant 1	1.10E+05	7.22E-05	6.58E-10	73.0	0.9563

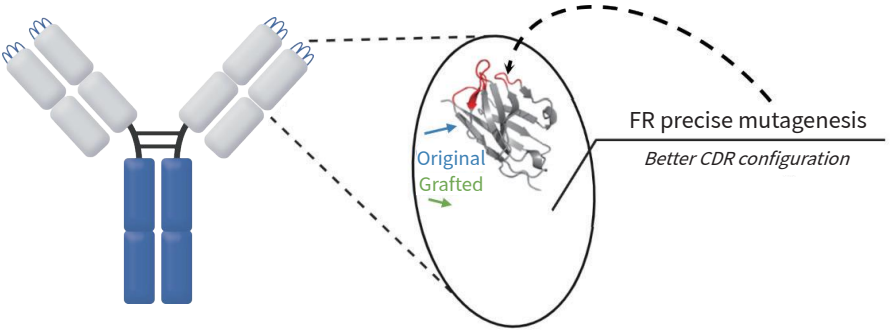
		Ka(M-1s-1)	Kd(s-1)	KD(M)	Rmax(RU)	Chi2(RU2)
Cyno	WT	7.56E+04	4.35E-05	5.75E-10	24.3	0.739
	Variant 1	1.21E+06	2.27E-04	1.88E-10	55.2	0.7985



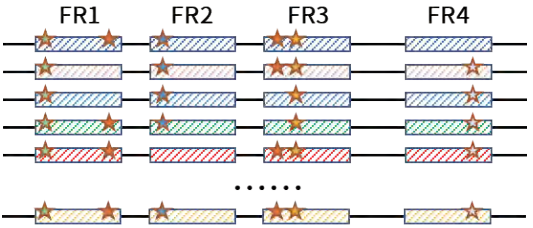


100-fold increase of affinity with only one amino acid mutation at each of LCDR3 and HCDR3.

DiLibrary™ applications:
Antibody Humanization



Human IgG FR germline library



Case study:

Humanization of Anti-BCMA rabbit monoclonal antibody

Analyte	Ka (1/Ms)	Kd (1/s)	KD (nM)	Rmax (RU)
Rabbit BCMA	4.3884E+4	1.1750E-5	0.267	65.3
Hu-BCMA1	3.1023E+4	4.3530E-6	0.14	105.2
Hu-BCMA2	2.8604E+4	4.5480E-6	0.159	78.9
Hu-BCMA3	6.4527E+4	1.0250E-6	0.015	81.3
Hu-BCMA4	3.3508+4	1.9060E-6	0.056	92.1

Comparing with parental rabbit IgG, the humanized antibody (Hu-BCMA3) exhibits 18-fold increase on binding affinity to its target.

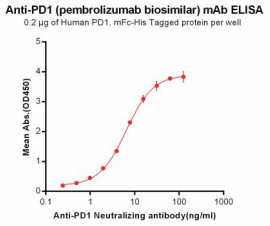
Biosimilar Reference Antibodies

Wide Coverage of Hot Drug Targets & Popular Biosimilars

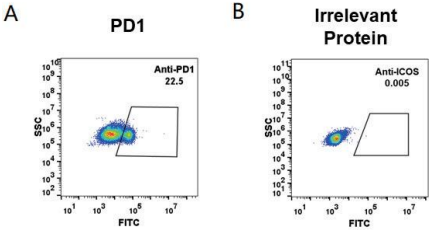
Validated with In-House Recombinant Proteins & Cells

PE & Biotin Labeling for Versatile Applications

Case Study

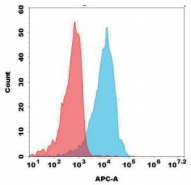


Anti-PD-1 pembrolizumab biosimilar (Cat.No.BME100006) binds pre-coated PD1 ELISA plate (0.24-6.49 ng/ml).



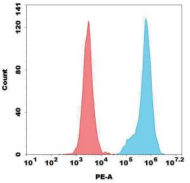
HEK293 cells expressing PD1 (A) or irrelevant protein (B) were stained with Anti-PD-1 pembrolizumab biosimilar (Cat# BME100006) 1μg/ml and Alexa 488-secondary.

Biotinylated

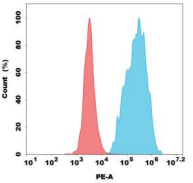


Biotinylated Anti-STEAP1 Vandortuzumab biosimilar (Cat.No.BME100188B) mAb on SNU-5 cell line (Blue histogram) or 293T (Red histogram).

PE-conjugated



PE-conjugatedAnti-Trop2 sacituzumab biosimilar (Cat.No.BME100023P) on T-47D cell line (Blue histogram) or 293T (Red histogram).



Anti-CLDN18.2 zolbetuximab biosimilar (Cat.No.BME100075P) on AGS-CLDN18.2 stable expression cell line (Blue histogram) or 293T (Red histogram).

Featured Products

Target	sku	Product name
TIGIT	BME100026	Anti-TIGIT (tiragolumab biosimilar) mAb
LILRB4	BME100237	Anti-LILRB4(MK-0482 biosimilar) mAb
GPC3	BME100147	Anti-GPC3(Hu9F2) mAb
TSHR	BME100079	Anti-TSHR (M22) mAb
MAPT	BME100498	Anti-MAPT(etalanetug biosimilar) mAb
GPC3	BME100083	Anti-GPC3(codrituzumab biosimilar) mAb
CLDN1	BME100750	Anti-CLDN1(eclutatug biosimilar) mAb

For more in-stock reference antibodies or custom services, please visit the DIMA website at https://www.dima-bio.com/biosimilar-eference-antibodies or contact info@dimabio.com for more details.

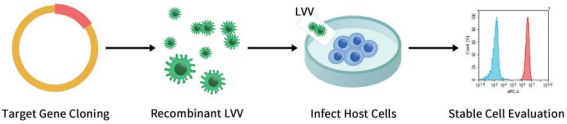
Gene Overexpression Stable Cell Lines

100+
STABLE CELL LINES

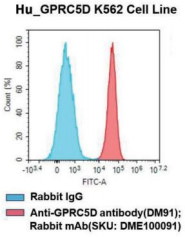
CUSTOMIZED
STABLE CELL LINES

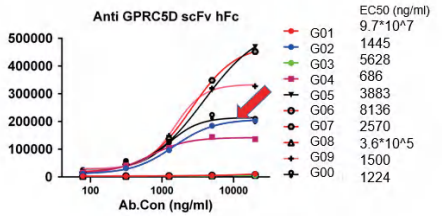
Including **K562**
293T,CHO,
Jurkat and more

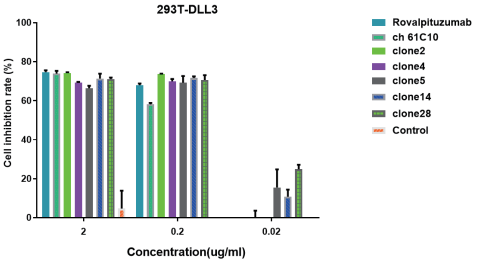
Proven Applications
Antibody Development
Preclinical Validation



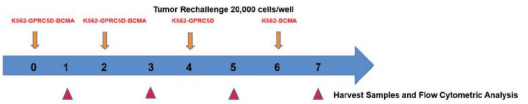
Case Study







Cytotoxicity screening of ADC candidate antibodies using the 293T-DLL3 stable cell line(Cat. No.CEL100039) helps identify antibodies with effective internalization.



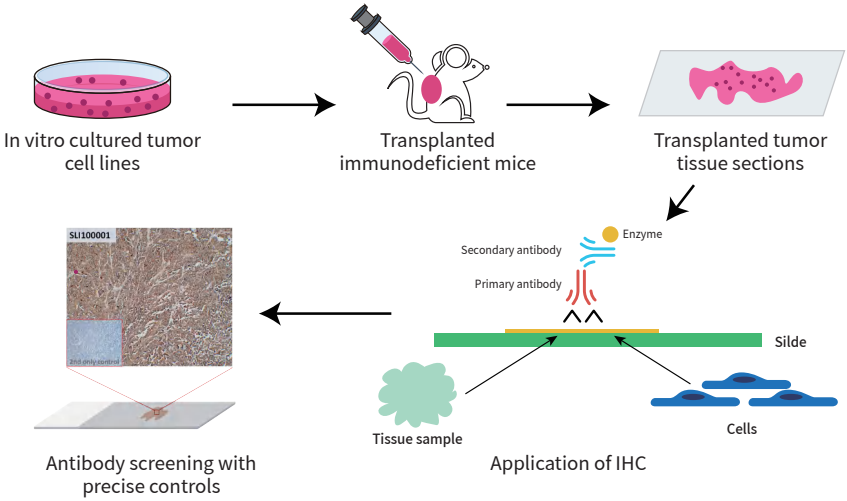
Using K562 stable cell lines expressing GPRC5D/BCMA as surrogate tumor cells, co-cultured with CAR-T cells. In this 7-day assay, CAR-T cells undergo four rounds of tumor challenge to assess the cytotoxicity of T cells against these "target cells," thereby evaluating the specificity of T cell-mediated killing and the potential off-target risks.

Featured Products

Target	Host Cell	sku	Product name
GPRC5D	K562	CEL100001	Hu_GPRC5D K562 Cell Line
PD-L1	K562	CEL100022	Hu_PD-L1 K562 Cell Line
PD-L1	Jurkat	CEL100023	Hu_PD-L1 Jurkat Cell Line
EGFR	K562	CEL100005	Hu_EGFR K562 Cell Line
Trop2	K562	CEL100030	Hu_TROP2 K562 Cell Line
HER3	Jurkat	CEL100032	Hu_HER3 Jurkat Cell Line
CD47	CHO-S	CEL100040	Hu_CD47 CHO-S Cell Line
GPR75	CHO-S	CEL100092	Hu_GPR75 CHO-S Cell Line
B7-H3	K562	CEL100101	Hu_B7-H3 K562 Cell Line
CTLA-4	CHO-S	CEL100105	Hu_CTLA-4 CHO-S Cell Line
EGFR	K562	CEL100005	Hu_EGFR K562 Cell Line
VEGFR2	K562	CEL100074	Hu_VEGFR2 K562 Cell Line
CD63	CHO-S	CEL100082	Hu_CD63 CHO-S Cell Line
TIGIT	K562	CEL100083	Hu_TIGIT K562 Cell Line
GPC3	K562	CEL100084	Hu_GPC3 K562 Cell Line
IL21R	K562	CEL100086	Hu_IL21R K562 Cell Line
VSIG4	Jurkat	CEL100087	Hu_VSIG4 Jurkat Cell Line
CCR2	K562	CEL100088	Hu_CCR2 K562 Cell Line
CDH1	CHO-S	CEL100089	Hu_CDH1 CHO-S Cell Line
CCR5	K562	CEL100090	Hu_CCR5 K562 Cell Line
BTLA	K562	CEL100091	Hu_BTLA K562 Cell Line
CD123	K562	CEL100011	Hu_CD123 K562 Cell Line
CSF1R	K562	CEL100014	Hu_CSF1R K562 Cell Line
CD25	K562	CEL100020	Hu_CD25 K562 Cell Line
ACVR2B	CHO-S	CEL100093	Hu_ACVR2B CHO-S Cell Line
ACVR2A	CHO-S	CEL100094	M_ACVR2A CHO-S Cell Line
ACVR2B	CHO-S	CEL100095	M_ACVR2B CHO-S Cell Line
GPR87	293T	CEL100096	Hu_GPR87 293T Cell Line
ACVR2A	CHO-S	CEL100097	Hu_ACVR2A CHO-S Cell Line
GPR75	CHO-S	CEL100092	Hu_GPR75 CHO-S Cell Line
TSHR	293T	CEL100098	Hu_TSHR 293T Cell Line
FCRL5	K562	CEL100099	Hu_FCRL5 K562 Cell Line
CLDN18.2	K562	CEL100100	Hu_CLDN18.2 K562 Cell Line
B7-H3	K562	CEL100101	Hu_B7-H3 K562 Cell Line
CD19	K562	CEL100102	Hu_CD19 K562 Cell Line
PTPRG	K562	CEL100103	Hu_PTPRG K562 Cell Line

For more in-stock stable cell lines or custom services, please visit the DIMA website at https://www.dimabio.com/-gene-overexpression-stable-cell-lines or contact info@dimabio.com for more details.

CDX tissue sections



- **Efficient and reliable xenograft models:** Covering various human tumor cell lines for model diversity and broad application.
- **Precise tissue sections:** High-quality slicing ensures tissue structure integrity and accuracy.
- **Comprehensive IHC controls:** Provide standardized immunohistochemistry control data to optimize antibody screening and validation.

IHC validation | Long-term stability | Derived from tumor models | In-stock supply | Customizable services

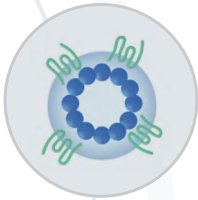
Partial Product List

Target	sku	Product name
BCMA|BTN3A1|CD138|CD147|CD30|CD33|CD38|CD47|CD63|CD99|CS1|GITR|GPC1|GPRC5D|ICAM-1|MUC1|PDL-1|SELPLG|TFRC|TIM3	SLI100001	M-NSG RPMI-8226 DiSliceX™ SlideSet
BTN3A2|CCR1|CD138|CD147|CD164|CD38|CXCR3|GPRC5D|KI67|LGALS1|SELPLG	SLI100002	Balb/C nu MM.1S DiSliceX™ SlideSet
AXL|CD63|EPCAM|LGALS1	SLI100003	Balb/C nu PC3 DiSliceX™ SlideSet
ADAM9|AFP|ALB|ANGPTL3|B7H3|CD112|CD24|CDH6|CLDN6|CLU|CXADR|GPC3|HER3|MSLN|PRLR|SCF	SLI100004	Balb/C nu HuH7 DiSliceX™ SlideSet

For more in-stock tissue sections or custom services, please visit the DIMA website at https://www.dima-bio.com/cdx-tissue-sections-for-ihc-screening or contact info@dimabio.com for more details.

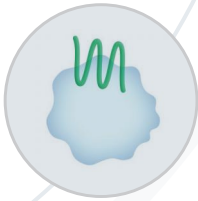
Solutions for the Full-length Multi-pass Transmembrane Proteins

- 5 Production Platforms
- Drug Targets for Cancer Therapy
- Function Validated Proteins

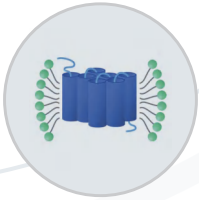


VLP

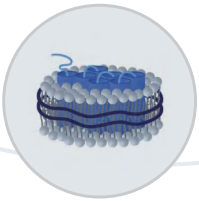
Exosome



MNP



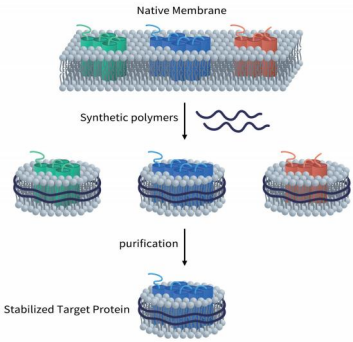
Detergent



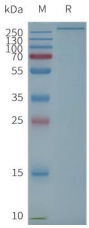
Synthetic Nanodisc

Synthetic Nanodiscs

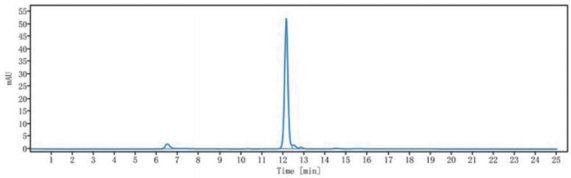
Multipass Transmembrane Proteins, Right off the Shelf.



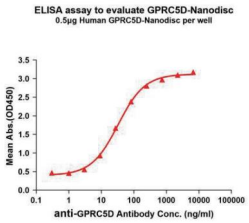
- **Largest in-stock selection: 500+** full-length multi-transmembrane proteins, including GPCRs and ion channels, leading globally.
- **Maximum transmembrane count:** Successfully produced **24**-transmembrane full-length proteins, pushing industry limits.
- **Comprehensive validation:** High purity, solubility, and stability, maintaining native conformation and supporting room-temperature shipping.
- **Flexible customization:** Personalized protein expression services to meet diverse research needs.



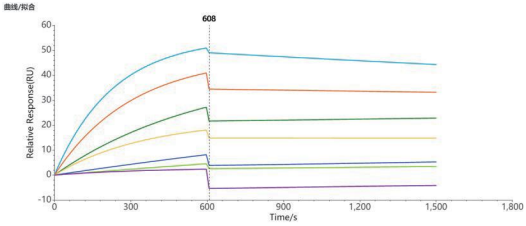
Human SCN5A-Nanodisc, Flag Tag on SDS-PAGE.
24-pass Na+ ion channel, cat. No.FLP100726



The purity of Human SLC7A11 full length protein-synthetic nanodisc is greater than 90% as determined by SEC-HPLC.
12-pass Cystine/glutamate transporter, Cat. No. FLP100048



ELISA analysis using anti-GPRC5D monoclonal antibody (Cat. No. DME100090) and purified human GPRC5D full length protein-synthetic nanodisc, 7-pass GPCR, Cat. No. FLP100011



Human CCR8-Nanodisc can bind Anti-CCR8 antibody (BME100115) with an affinity constant of 1.408 nM as determined in a SPR assay.
7-pass GPCR, cat. No.FLP100037

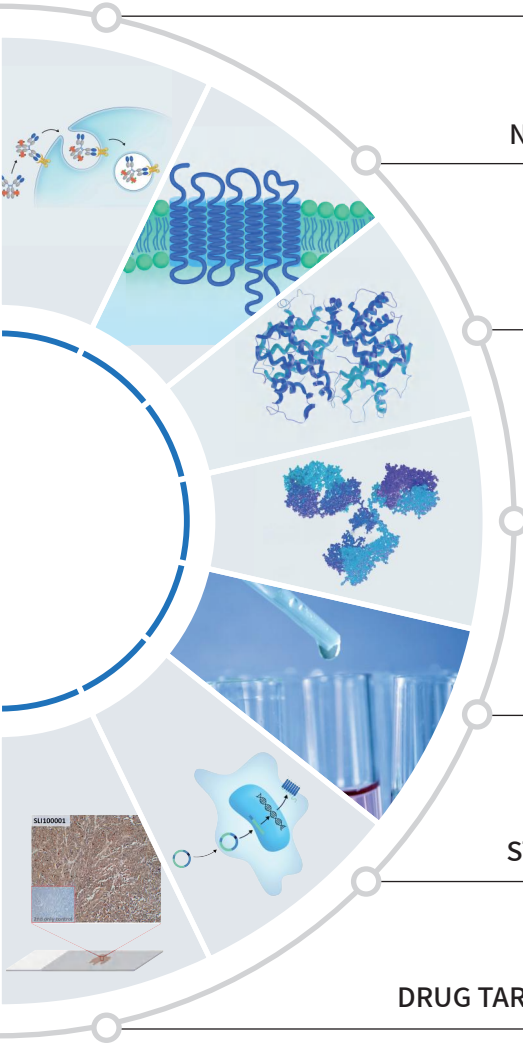
In-Stock Synthetic Nanodiscs for Multi-Pass Transmembrane Proteins

Featured GPCR Proteins

Target	Cat. No.	Product name
ADGRE2	FLP100090	Human ADGRE2 full length protein-synthetic nanodisc
ADORA2A	FLP100020	Human ADORA2A full length protein-synthetic nanodisc
C5AR1	FLP100086	Human C5AR1 full length protein-synthetic nanodisc
CB1	FLP100023	Human CB1 full length protein-synthetic nanodisc
CCR1	FLP100094	Human CCR1 full length protein-synthetic nanodisc
CCR3	FLP100075	Human CCR3 full length protein-synthetic nanodisc
CCR4	FLP100024	Human CCR4 full length protein-synthetic nanodisc
CCR6	FLP100059	Human CCR6 full length protein-synthetic nanodisc
CCR7	FLP100060	Human CCR7 full length protein-synthetic nanodisc
CCR8	FLP100037	Human CCR8 full length protein-synthetic nanodisc
CCR9	FLP100061	Human CCR9 full length protein-synthetic nanodisc
CXCR1	FLP100091	Human CXCR1 full length protein-synthetic nanodisc
CXCR2	FLP100066	Human CXCR2 full length protein-synthetic nanodisc
CXCR3	FLP100053	Human CXCR3 full length protein-synthetic nanodisc
CXCR4	FLP100074	Human CXCR4 full length protein-synthetic nanodisc
CXCR5	FLP100067	Human CXCR5 full length protein-synthetic nanodisc
CXCR7	FLP100095	Human CXCR7 full length protein-synthetic nanodisc
F2RL1	FLP100036	Human F2RL1 full length protein-synthetic nanodisc
FSHR	FLP100047	Human FSHR full length protein-synthetic nanodisc
FZD10	FLP100052	Human FZD10 full length protein-synthetic nanodisc
GCGR	FLP100085	Human GCGR full length protein-synthetic nanodisc
GPR75	FLP100031	Human GPR75 full length protein-synthetic nanodisc
GPRC5D	FLP100011	Human GPRC5D full length protein-synthetic nanodisc
HCRTR1	FLP100099	Human HCRTR1 full length protein-synthetic nanodisc
LGR4	FLP100072	Human LGR4 full length protein-synthetic nanodisc
LGR5	FLP100073	Human LGR5 full length protein-synthetic nanodisc
PTGER4	FLP100097	Human PTGER4 full length protein-synthetic nanodisc
SSTR2	FLP100013	Human SSTR2 full length protein-synthetic nanodisc
TSHR	FLP100045	Human TSHR full length protein-synthetic nanodisc

Discover Your Protein from Our Comprehensive Nanodisc Collection at the Following Website: https://www.dimabio.com/synthetic-nanodisc-membrane-protein

DIMA Products



ADC ASSAY REAGENTS

NANODISC MEMBRANE PROTEINS

DRUG TARGET PROTEINS

DIMA MONOCLONAL ANTIBODIES

BIOSIMILAR REFERENCE ANTIBODIES

STABLE DRUG TARGET CELL LINEs

DRUG TARGET POSITIVE TISSUE SECTIONS

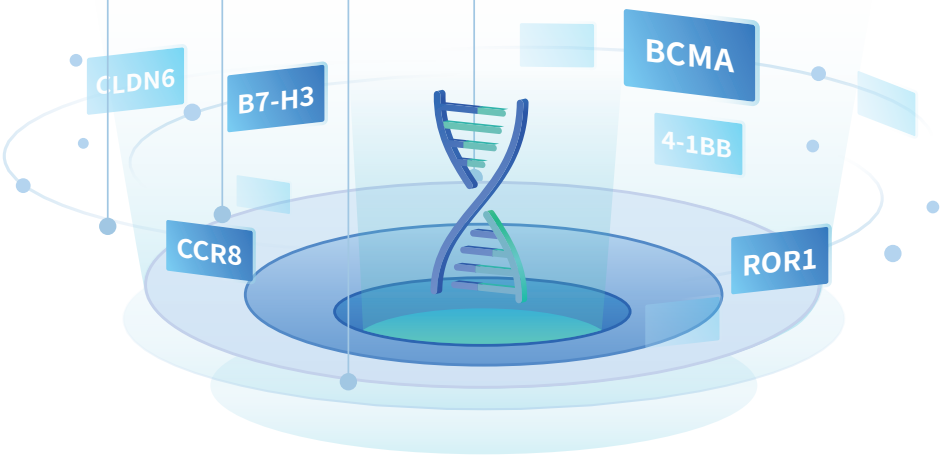
DIMA Technology Platforms

1 DiMPro™ Membrane Protein Preparation Platform

2 Single B Monoclonal Antibody Development Platform

3 Mammalian Cell Display Antibody Engineering Platform

4 Preclinical Antibody Functional Evaluation Platform



DIMA Biotechnology

Dedicate on immuno-oncology,
Perfect with recombinant mAb development

DIMA Biotechnology

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