DIMA BIOTECH
Recombinant mAbs and proteins

DIMA Biotechnology LLC

“All Druggable Targets (ADT)”Lead mAb molecules

Dedicate on Drug Targets，Specialize in recombinant mAb development

2024 / 05 / 10

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All Druggable Targets (ADT) Lead Discovery Program

To accelerate pre-clinical antibody drug lead selection within Biopharma, DIMA has launched the "All Druggable Targets (ADT)" lead discovery program, utilizing its proprietary single B cell discovery platform. This program aims to pre-develop lead mAb molecules and their corresponding DimAb B cell libraries for all druggable targets, facilitating the transformation of these pre-validated molecules into readily available products. This approach reduces the burden on Biopharma, eliminating the need for extensive time and resource investment in early-stage discovery efforts. To date, over 5,000 mAb molecules have been validated across more than 400 drug targets, spanning blood tumors, immune checkpoints, and solid tumors. Notably, among them, over 80 represent promising ADC drug targets.

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
2B4	Q9BZW8	*	*				
4-1BB	Q07011	*	*				
4-1BB Ligand	P41273	*	*				
5T4	Q13641	*	*	*	*	*	ADC
A29L	Q77HM6	*					
A35R	Q8V4U4	*					
ACE2	Q9BYF1	*	*				
ACVR1C	Q8NER5	*					
ACVR2A	P27037						
ACVR2B	Q13705						
ACVRL1	P37023	*					
ADAM15	Q13444						
ADAM8	P78325	*					

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
ADAM9	Q13443	*	*	*			ADC
ADAMTS1	Q9UHI8	*	*				
ADGRE1	Q14246	*	*				
ADGRE2	Q9UHX3	*	*				
ADORA2A	P29274	*					
AFP	P02771	*	*				
AFP(TCR)	P02771	*					
AGR2	O95994	*					
AGTR1	P30556	*					
ALB	P02768	*	*				
ALPP	P05187	*	*				
AMHR2	Q16671	*	*				
ANGPTL3	Q9Y5C1	*	*				
ANPEP	P15144	*	*				
ANTXR1	Q9H6X2	*					
ANXA1	P04083	*					
APCDD1	Q8J025	*	*				
APLP2	Q06481	*					
AREG	P15514	*					
ASGR1	P07306	*	*				
AXL	P30530	*	*	*	*	*	ADC
B4GALT1	P15291	*	*				
B7-1	P33681	*	*				
B7-2	P42081	*	*				
B7-H2	O75144	*	*	*			
B7-H3	Q5ZPR3	*	*	*	*	*	ADC
B7-H4	Q7Z7D3	*	*				ADC
B7-H5	Q9H7M9	*	*				
B7-H6	Q68D85	*	*	*			
B7-H7	Q9UM44	*	*				

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
BAFF	Q9Y275	*	*				
BAFF-R	Q96RJ3	*	*	*			
BCAM	P50895	*					
BCL2L1	Q07817	*	*				
BCMA	Q02223	*	*	*	*	*	ADC, CAR-T
BMP6	P22004						
BRD4	O60885	*					
BST1	Q10588	*	*				
BTC	P35070	*					
BTLA	Q7Z6A9	*	*				
BTN3A1	O00481	*	*	*			
BTN3A2	P78410	*	*				
BTN3A3	O00478	*					
CA12	O43570						
CA9	Q16790	*	*				ADC
CALCA	P01258	*					
CALR	P27797	*					
Canine IL31	C7G0W1	*					
Canine PD1	AOA090BAM7	*					
CB1	P21554	*	*				
CB2	P34972	*					
CCL20	P78556						
CCR1	P32246	*	*				
CCR2	P41597	*	*				
CCR4	P51679	*	*				
CCR5	P51681	*	*				
CCR6	P51684	*	*				
CCR7	P32248	*					ADC
CCR8	P51685	*	*	*			
CCR9	P51686	*					

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
CD10	P08473	*	*				
CD106	P19320						
CD112	Q92692	*	*				
CD114	Q99062	*	*				
CD117	P10721	*	*				ADC
CD123	P26951	*	*	*	*	*	ADC, CAR-T
CD138	P18827	*	*	*	*	*	ADC, CAR-T
CD14	P08571	*					
CD142	P13726	*	*				ADC
CD147	P35613	*	*				
CD155	P15151	*	*				
CD160	O95971	*	*				
CD164	Q04900	*	*				
CD166	Q13740	*	*				ADC
CD171	P32004	*	*				
CD19	P15391	*	*				ADC
CD2	P06729	*	*				
CD20	P11836	*					
CD200	P41217	*	*				
CD200R1	Q8TD46	*					
CD205	O60449	*	*				ADC
CD21	P20023	*	*				
CD22	P20273	*	*	*			ADC, CAR-T
CD23	P06734	*	*				
CD24	P25063	*	*				
CD26	P27487	*					
CD27	P26842	*	*	*			
CD28	P10747	*	*	*			ADC
CD30	P28908	*	*	*	*	*	ADC, CAR-T
CD30 Ligand	P32971	*	*				

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
CD304	O14786	*					
CD32a	P12318	*	*				
CD33	P20138	*	*	*	*	*	ADC, CAR-T
CD34	P28906	*	*				
CD36	P16671	*	*				
CD37	P11049	*	*				ADC
CD38	P28907	*	*	*	*	*	ADC, CAR-T
CD3D&CD3E	P04234&P07766	*					
CD3E	P07766	*	*				
CD3G	P09693	*					
CD40	P25942	*	*	*			
CD40 Ligand	P29965	*	*				
CD43	P16150	*	*				
CD44	P16070	*	*				ADC
CD45	P08575	*	*	*			
CD46	P15529	*	*				ADC
CD47	Q08722	*	*	*			
CD48	P09326	*	*				ADC
CD5	P06127	*	*				
CD52	P31358	*					
CD56	P13591	*	*				ADC
CD5L	O43866	*	*				
CD6	P30203	*	*				
CD62L	P14151	*	*				
CD63	P08962	*	*				
CD68	P34810						
CD69	Q07108	*					
CD7	P09564	*	*	*			
CD70	P32970	*	*	*	*	*	ADC
CD72	P21854	*	*	*			

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
CD73	P21589	*	*				
CD74	P04233	*	*				ADC
CD79B	P40259	*	*				ADC
CD81	P60033	*	*				
CD83	Q01151	*	*				
CD9	P21926	*					
CD93	Q9NPY3	*	*				
CD94	Q13241						
CD96	P40200	*	*				
CD98	P08195	*	*				
CD99	P14209	*	*	*			
CDCP1	Q9H5V8	*					
CDH1	P12830	*	*				
CDH17	Q12864	*	*	*	*	*	ADC
CDH3	P22223	*	*				ADC
CDH6	P55285	*	*				ADC
CEACAM1	P13688	*					
CEACAM5	P06731	*	*	*	*	*	ADC
CEACAM6	P40199	*	*				ADC
CEACAM8	P31997	*					
CFB	P00751	*	*				
CGRP	P06881	*	*				
CHI3L1	P36222	*	*				
CHODL	Q9H9P2	*	*				
CHRM2	P08172	*					
CLDN18.2	P56856	*	*	*	*	*	ADC
CLDN2	P57739						
CLDN3	O15551						
CLDN4	O14493						
CLDN5	O00501						

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
CLDN6	P56747	*					ADC, CAR-T
CLEC12A	Q5QGZ9	*	*	*			
CLEC14A	Q86T13	*					
CLEC1A	Q8NC01	*	*				
CLEC2D	Q9UHP7	*	*				
CLEC4C	Q8WTT0	*	*				
CLEC9A	Q6UXN8	*	*				
CLU	P10909	*	*				
CPM	P14384	*					
CRTAM	O95727	*	*				
CS1	Q9NQ25	*	*	*			ADC, CAR-T
CSF1R	P07333	*	*	*	*	*	ADC
CSPG4	Q6UVK1	*	*				
CTLA-4	P16410	*	*				
CXADR	P78310	*	*				
CXCL1	P09341	*	*				
CXCL10	P02778	*					
CXCL4	P02776	*	*				
CXCL5	P42830	*					
CXCR1	P25024	*	*				
CXCR2	P25025	*	*				
CXCR3	P49682	*	*				
CXCR4	P61073	*	*				
CXCR5	P32302	*	*				
CXCR7	P25106	*	*				
DDR1	Q08345	*	*				
DKK1	O94907	*	*	*			
DLK1	P80370						
DLL3	Q9NYJ7	*	*	*			ADC, CAR-T
DNAM-1	Q15762	*	*				

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
ECSCR	Q19T08	*					
EDA	Q92838	*	*				
EFNA3	P52797	*					
EGFP	P56856	*	*				ADC
EGFR	P00533	*	*	*	*	*	ADC
EGFRVIII	Q01279	*	*		almost		
EMCN	Q9ULC0	*	*				
ENPP3	O14638	*	*				ADC
EPCAM	P16422	*	*	*	*		ADC
EPHA2	P29317	*	*				ADC
EPHA3	P29320	*	*				
EPHA4	P54764	*	*				
EPHA5	P54756	*					
EREG	O14944	*	*				
FAP	Q12884	*	*	*	*	*	ADC
FCGR3A	P08637	*	*				
FCGR3B	O75015	*					
FCRL5	Q96RD9	*	*	*	*	*	ADC
Feline IL31	A0A2I2UKP7	*					
FGF19	O95750	*	*				
FGF21	Q9NSA1	*	*				
FGFR2IIIb	P21802-3	*					
FGFR4	P22455	*	*				
FLT3	P36888	*	*				ADC
FLT3 Ligand	P49771	*	*				
FOLR1	P15328	*	*	*			ADC
FOLR2	P14207	*	*				
FSTL1	Q12841	*					
FZD10	Q9ULW2	*	*				ADC
FZD4	Q9ULV1	*	*				

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
Galectin-9	O00182	*	*				
GAS6	Q14393	*					
GAST	P01350	*					
GDF15	Q99988	*	*				
GDNF	P39905	*	*				
GFAP	P14136	*	*				
GFRA3	O60609	*					
GHR	P10912	*					
GIPR	P48546	*	*				
GITR	Q9Y5U5	*	*	*			
GITR Ligand	Q9UNG2	*	*				
GLP1R	P43220	*					
GM-CSF	P04141	*	*				
GNRHR	P30968	*					
GP6	Q9HCN6	*	*				
GPA33	Q99795	*	*				
GPC1	P35052	*	*				
GPC3	P51654	*	*	*	*	*	
GPNMB	Q14956	*	*				ADC
GPR20	Q99678	*					
GPR55	Q9Y2T6	*					
GPR56	Q9Y653	*					
GPR75	O95800	*	*				
GPR77	Q9P296	*	*				
GPR81	Q9BXC0						
GPR87	Q9BY21	*	*				
GPRC5D	Q9NZD1	*	*	*	*	*	ADC, CAR-T, BsAb
GRP	P07492	*					
GRPR	P30550	*					
GUCY2C	P25092	*	*	*	*	*	ADC

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
HAMP	P81172	*					
HBEGF	Q99075	*	*				
HBsAg	P12934	*					
HER2	P04626	*	*	*			ADC
Her3	P21860	*	*				ADC
HVEM	Q92956	*	*	*			
IBSP	P21815						
ICAM-1	P05362	*	*				ADC
ICOS	Q9Y6W8	*	*				
IFN gamma	P01579	*	*				
IFNA2	P01563	*					
IFNAR1	P17181	*	*	*			
IFNAR2	P48551	*					
IFNB1	P01574	*					
IGF1	P05019	*	*				
IGF-1R	P08069	*	*				ADC
IGFBP2	P18065						
IGFBP7	Q16270	*	*				
IL11RA	Q14626	*	*				
IL12RB1	P42701	*					
IL13	P35225						
IL13RA1	P78552	*	*				
IL15RA	Q13261	*	*				
IL17RA	Q96F46	*	*				
IL18BP	O95998	*					
IL18RA	Q13478	*	*				
IL19	Q9UHD0	*					
IL1A	P01583	*	*				
IL1B	P01584	*	*				ADC
IL2	P60568	*	*				

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
IL20RA	Q9UHF4	*					
IL21	Q9HBE4	*					
IL21R	Q9HBE5	*	*				
IL22	Q9GZX6	*	*				
IL23(IL23A&IL12B)	Q9NPF7/P29460	*					
IL23A	Q9NPF7	*					
IL2RA	P01589	*	*				ADC
IL31RA	Q8NI17						
IL4	P05112						
IL4RA	P24394	*	*				
IL5	P05113	*	*				
IL5RA	Q01344	*	*				
IL6	P05231	*	*				
IL6R	P08887	*	*				
IL7RA	P16871	*	*				
ITGA2&ITGB1	P17301&P05556	*					
JAM-A	Q9Y624	*	*				
KCNK9	Q9NPC2	*					
KIR2DL1	P43626	*					
KLRG1	Q96E93	*	*				
LAG3	P18627	*	*				
LAIR1	Q6GTX8	*					
LGALS1	P09382	*	*				
LGALS3	P17931	*					
LGR4	Q9BXB1	*					
LIGHT	O43557	*	*				
LILRB2	Q8N423	*	*				
LIV-1	Q13433	*	*				ADC
LRP10	Q7Z4F1	*					
LY6E	Q16553						

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
MAGE-A4(TCR)	P43358	*					
M-CSF	P09603	*	*				
MDR-1	P08183	*					
MELTF	P08582						
Mesothelin	Q13421	*	*	*	*	*	ADC
MET	P08581	*					ADC
MICA	Q29983	*	*				ADC
MICB	Q29980	*	*				ADC
MMP14	P50281	*					
MMP9	P14780	*					
MRGPRX2	Q96LB1	*					
MST1R	Q04912	*					
MUC1	P15941	*	*	*	*	*	ADC
MUC16	Q8WXI7	*					
NCR1	O76036	*	*				
Nectin-4	Q96NY8	*	*				ADC
NEFL	P07196	*	*				
NKG2A	P26715	*	*				
NKG2D	P26718	*	*				
NKP30	O14931	*	*				
NLRP3	Q96P20	*					
NOTCH3	Q9UM47	*					ADC
NPR1	P16066	*					
NRG1	Q02297	*	*				
NTB-A	Q96DU3	*	*				ADC
NY-ESO-1(TCR)	P78358	*					
OR2H1	Q9GZK4	*					
OX40	P43489	*	*				
OX40 Ligand	P23510	*	*				
p16	P42771	*					

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
P2RX7	Q99572	*					
PAI1	P05121						
PCSK9	Q8NBP7	*	*				
PD-1	Q15116	*	*				
PD-L1	Q9NZQ7	*	*				ADC
PDL2	Q9BQ51	*	*				
PF4V1	P10720	*					
PGF	P49763	*	*				
PGLYRP1	O75594	*	*				
PMEL	P40967	*	*				
PRLR	P16471	*	*				ADC
PROKR1	Q8TCW9						
PROM1	O43490	*					
PSCA	O43653	*	*				
PSMA	Q04609	*					ADC
PTGER4	P35408						
PTPRG	P23470	*	*				
PVRIG	Q6DKI7	*	*				
QSOX1	O00391						
RNASE4	P34096	*					
RNF43	Q68DV7	*					
ROR1	Q01973	*	*	*	*	*	ADC
ROR2	Q01974	*	*				ADC
RSPO3	Q9BXY4	*					
S100A9	P06702	*					
SARS-CoV-2(2019-nCoV) Nucleocapsid	P0DTC2	*					
SARS-CoV-2(2019-nCoV)S protein RBD	P0DTC2	*	*				

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
SARS-CoV-2(Omicron)Nucleocapsid	P0DTC2	*					
SARS-CoV-2(Omicron)S protein RBD	P0DTC2	*					
SCF	P21583	*	*				
SELP	P16109	*	*				
SELPLG	Q14242	*	*				
SEMA4D	Q92854	*					
SEZ6	Q53EL9	*	*				ADC
SIGLEC15	Q6ZMC9						
SIGLEC7	Q9Y286	*	*				
SIGLEC9	Q9Y336	*					
SIRPα	P78324	*	*				
SLAMF1	Q13291	*	*				
SLAMF5	Q9UIB8	*	*				
SLC2A4	P14672	*					
SLC4A7	Q9Y6M7	*					
SLC7A11	Q9UPY5	*					
SPARC	P09486	*					
SSTR2	P30874	*	*	*	*	*	
STEAP1	Q9UHE8	*					
TACI	O14836	*	*				
TAFA5	Q7Z5A7	*					
TENM4	Q6N022	*	*				
TFRC	P02786	*	*				ADC
TGFBR1	P36897	*					
TGFBR2	P37173	*	*				ADC
TIGIT	Q495A1	*	*				
TIM1	Q96D42	*	*				ADC
TIM3	Q8TDQ0	*	*				

Target	Uniprot	B Cell Library	Chimeric	Humanized	CAR	In vitro assay	Antibody Drug
TM4SF1	P30408	*					
TNFRSF10B	O14763	*	*				ADC
TNFRSF1B	P20333	*	*				
TNFSF11	O14788	*	*				
TNFSF12	O43508	*	*				
TNFSF15	O95150	*	*				
TPSAB1	Q15661	*					
TREM2	Q9NZC2	*	*				
Trop2	P09758	*	*				ADC
TRPA1	O75762	*					
TRPV1	Q8NER1	*	*				
TSHR	P16473	*					
TSLP	Q969D9	*	*				
TweakR	Q9NP84	*					
TYRO3	Q06418	*					
UCHL1	P09936	*	*				
UPA	P00749	*	*				
VEGFA	P15692	*	*				ADC
VEGFR2	P35968	*	*				
VSIG4	Q9Y279	*	*				
VWF	P04275	*	*				
WT1(TCR)	P19544	*					
YAP1	P46937	*	*				
ZNRF3	Q9ULT6						

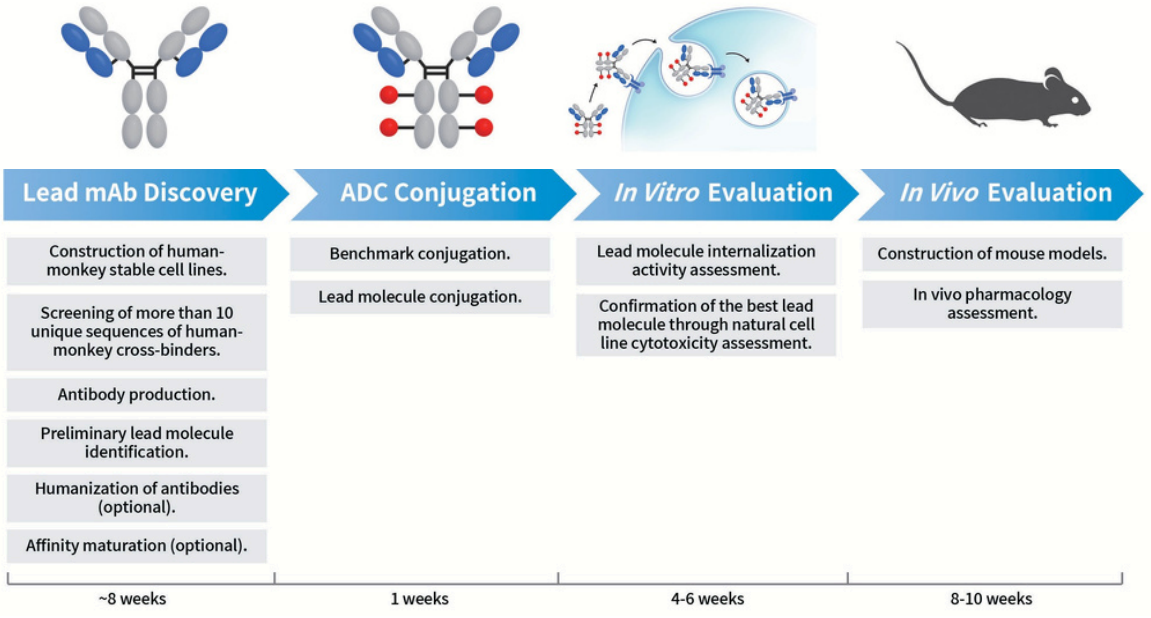
CAR-T Target Under Development

Target	Lead mAb discovery	CAR Construction	Lentivirus packaging	In Vitro Testing	In Vivo Testing	IIT
GPRC5D						
BCMA						
GPRC5D&BCMA						
CD138						
GPC3						
FcRL5						
Claudin18.2						
CD38						
Mesothelin						
5T4						
CD70						
AXL						
CD123						
MUC1						
EGFR						
CEACAM5						
CS1						
FAP						
B7H3						
EpCAM						
ROR1						
GUCY2C						
FOLR1						
CCR8						
CD7						
CDH17						
CD79A						
CD79B						
CD30						
CD33						
CDH6						
GPC1						
DLL3						
EGFRⅧ						
CSF1R						
SSTR2						

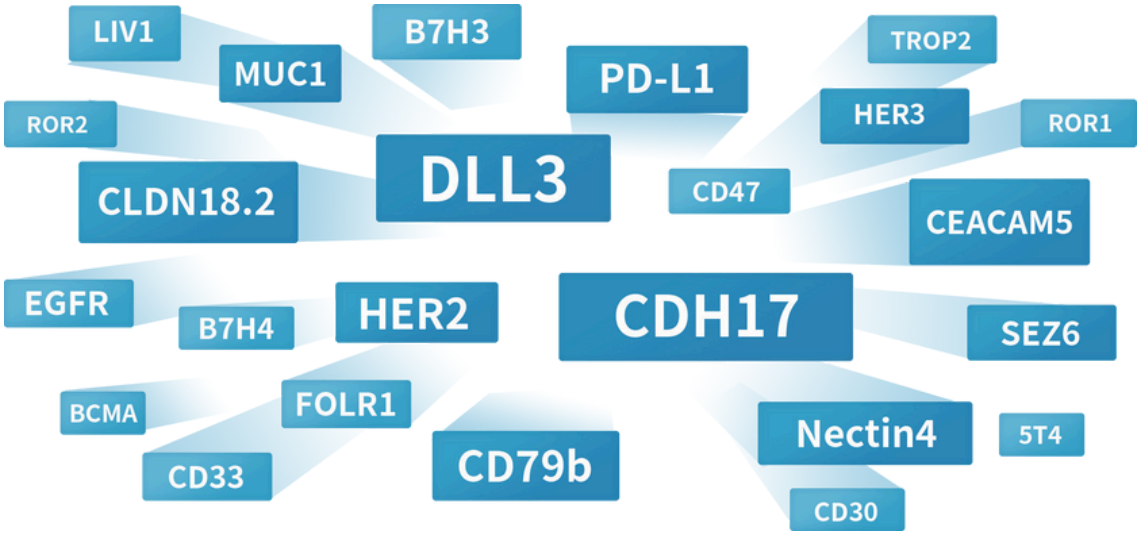
Discovery of ADC Lead Molecules

- 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



Pre-validated Lead mAbs against Hot ADC Targets

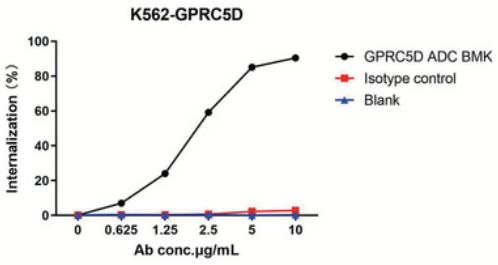


ADC Payload and Linker Antibodies

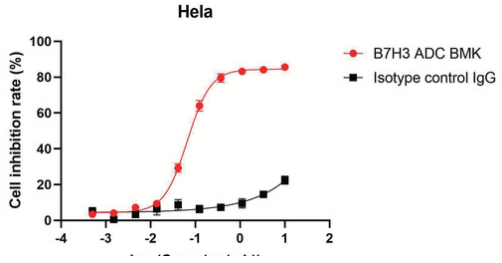
Target	B Cell Library	Immunization	mAbs	Applications
MMAE	*		*	ADC Payload Antibody
SN-38	*		*	ADC Payload Antibody
Deruxtecan	*		*	ADC Payload Antibody
DM1	*			ADC Payload Antibody
Eribulin	*		*	ADC Payload Antibody
StrepA		*		ADC Payload Antibody
Dxd	*		*	ADC Payload Antibody
(G4S)4	*			ADC linker Antibody

ADC mAb Internalization Assay Reagents

Catalog No.	Product Description
AME1000001	DiTagTM pH sensitive IgG labeling reagent
AME1000002	DiTagTM pH sensitive IgG labeling reagent plus
AME1000003	DiTagTM MMAE IgG labeling reagent



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.



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

For more information, visit our ADC websites!

DIMA BIOTECH
Recombinant mAbs and proteins

DIMA Biotechnology LLC

Dedicate on immuno-oncology, Perfect with recombinant mAb development

5000+ **In-stock IgG Sequences**

400+ **Druggable Targets**

- **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)**
- **Full Development Solutions for Multi-transmembrane Targets (Nanodisc, VLP, MNP, Exosome, ECD)**

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