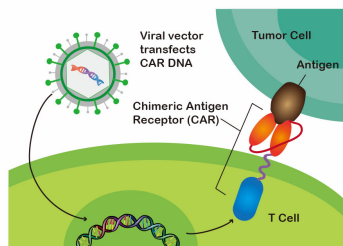


Targets of CAR-T Cell Therapy

Creative BioMart®

Chimeric antigen receptor T (CAR-T) is an engineered receptor which grafts an arbitrary specificity onto an immune effector cell. In a CAR-T cell treatment, a patient's immune cells are engineered in the laboratory to attack cancer cells. In this approach, immune cells are removed from a patient, armed with new proteins that allow them to recognize cancer, and given back to the patient in large numbers. These cells persist in the body, becoming "living drugs."

In 2017, two CD19-targeting CAR T-cell therapies were approved by the Food and Drug Administration (FDA), one for children and young adults with acute lymphoblastic leukemia (ALL) and the other for adults with advanced lymphomas. This success fueled the efforts to develop and advance CAR-T cell therapy targeting other cancer-specific antigens. Beyond CD19, there is a growing list of targets being investigated for therapeutic intervention.



Targets of CAR T-cell Therapy Supported by Creative BioMart

TNFRSF17	CD19	TNFRSF8	CD5	ULBP1	CEACAM5	CD276
IL3RA	MS4A1	CD33	NCAM1	ULBP2	MET	CSPG4
SDC1	CD22	CD38	CD70	IL1RAP	EGFR	CD133
EGFRvIII	EPCAM	EPHA2	ERBB2	GPC3	MSLN	TEM1
MUC1	PDCD1	CD274	KDR	IL13RA2	FOLH1	GPNMB
FAP	CA9	FOLR1	L1CAM	ROR1	CD23	PSCA
CD44	CD174	SLAMF7	GD2			

It is an essential step to evaluate CAR expression in development and production of CAR-T cells. Generally, using flow cytometry, where anti-Fab antibody, protein L or target antigens could be used for antibody detection. Target antigen is widely considered as the best option, because of its high specificity and minimal background staining.

Targets of CAR-T Cell Therapy

To satisfy the fast growing need in CAR-T development, Creative BioMart has prepared a variety of antigen proteins to provide large selection of ready-to-use options. In addition, we also bring to the market some special proteins that have been difficult to express or purify.

CAR T target molecule	Cat #	CAR T target molecule	Cat #
TNFRSF17	TNFRSF17-2348H	MSLN	MSLN-491H
IL3RA	IL3RA-3178H	Muc1	MUC1-448H
SDC1	SDC1-3352H	PDCD1	PDCD1-822H
CD19	CD19-3309H	CD274	CD274-592H
MS4A1	MS4A1-17H	KDR	KDR-6966H
CD22	CD22-3946H	IL13RA2	IL13RA2-212H
TNFRSF8	TNFRSF8-642H	FOLH1	FOLH1-2416H
CD33	CD33-234H	FAP	FAP-1141H
CD38	CD38-653H	CA9	CA9-256H
CD5	CD5-2222H	FOLR1	FOLR1-3889H
NCAM1	NCAM1-20H	L1CAM	L1CAM-3144H
CD70	CD70-639	ROR1	ROR1-387H
ULBP1	ULBP1-2352H	CD23	FCER2-5163H
ULBP2	ULBP2-5185H	CD44	CD44-3961H
IL1RAP	IL1RAP-2256H	CD174	FUT3-573H
CEACAM5	CEACAM5-3200H	SLAMF7	SLAMF7-3355H
MET	Met-194H	GD2	B4GALNT1-026H
EGFR	EGFR-30H	PSCA	PSCA-2002H
EGFRvIII	EGFR-286H	GNPMB	GNPMB-3782H
EPCAM	EPCAM-195H	CD276	CD276-3884H
EPHA2	EPHA2-409H	CSPG4	CSPG4-15H
ERBB2	ERBB2-922H	CD133	PROM1-45H
GPC3	GPC3-2246H	TEM1	CD248-23H