

CAR-T Cell Research

Personalized treatment for cancer reached a new milestone with the FDA approval of CAR T cells for treatment of leukemia and lymphoma. There is now rapid growth in research on the therapeutic uses of CAR T cells. A therapeutic CAR (chimeric antigen receptor) is a transmembrane protein designed with an extracellular domain based on an antibody single-chain variable fragment (scFv) and intracellular signaling domains derived from the T cell receptor, along with other costimulatory receptors.

Our CAR-T products include CAR-T cells (with and without sequence tags), control T cells, target cells, PBMC, recombinant proteins, cell media and activation beads. All CAR-T cells have been validated for CAR cell-surface expression and cytotoxicity.

CAR-T Cells

Description	Pack Size	Cat. No.
Mock scFv-CD28-CD3 ζ	1x10 ⁶ /vial	PM-CAR1000-1M
CD19scFv-CD28-CD3 ζ	1x10 ⁶ /vial	PM-CAR1001-1M
CD19scFv-4-1BB-CD3 ζ	1x10 ⁶ /vial	PM-CAR1002-1M
CD19scFv-CD28-4-1BB-CD3 ζ	1x10 ⁶ /vial	PM-CAR1003-1M
CD19scFv-CD28-4-1BB	1x10 ⁶ /vial	PM-CAR1004-1M
CD19scFv-4-1BB-CD3 ζ -GFP	1x10 ⁶ /vial	PM-CAR1005-1M
iCas9-T2A-antiCD19scFv-CD28-CD3 ζ	1x10 ⁶ /vial	PM-CAR1006-1M
CD19scFv-FLAG-CD28-CD3 ζ	1x10 ⁶ /vial	PM-CAR1007-1M
no scFv-CD28-CD3 ζ	1x10 ⁶ /vial	PM-CAR1008-1M
CD19scFv-CD28	1x10 ⁶ /vial	PM-CAR1009-1M
iCas9 HA-T2A-antiCD19scFv-CD28-CD3 ζ -GGGS-FLAG	1x10 ⁶ /vial	PM-CAR1010-1M
Mesothelin scFv-CD28-CD3 ζ (2nd)	1x10 ⁶ /vial	PM-CAR1011-1M
Mesothelin scFv-CD28-4-1BB-CD3 ζ (3rd)	1x10 ⁶ /vial	PM-CAR1012-1M
Mesothelin scFv-4-1BB-CD3 ζ (2nd)	1x10 ⁶ /vial	PM-CAR1013-1M
Mesothelin scFv-FLAG-CD28-CD3 ζ	1x10 ⁶ /vial	PM-CAR1014-1M
Mesothelin scFv-FLAG-4-1BB-CD3 ζ (2nd)	1x10 ⁶ /vial	PM-CAR1015-1M
VEGFR2scFv-CD28-CD3 ζ	1x10 ⁶ /vial	PM-CAR1016-1M
GPC3 scFv-CD28-CD3 ζ	1x10 ⁶ /vial	PM-CAR1017-1M
CD133 scFv-CD28-CD3 ζ	1x10 ⁶ /vial	PM-CAR1018-1M
EpCAM1 scFv-CD28-CD3 ζ	1x10 ⁶ /vial	PM-CAR1019-1M

Description	Pack Size	Cat. No.
EpCAM*scFv-CD28-CD3ζ * NheI restriction site introduced, N-terminal of scFV (amino acids: AS)	1x10 ⁶ /vial	PM-CAR1020-1M
EGFRscFv-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1021-1M
EGFRscFv-4-1BB-CD3ζ	1x10 ⁶ /vial	PM-CAR1022-1M
EGFR-TM28-GITR-CD3ζ	1x10 ⁶ /vial	PM-CAR1023-1M
Her2 scFv-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1024-1M
EGFR-TM28-CD3ζ-GITR	1x10 ⁶ /vial	PM-CAR1025-1M
CD33-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1026-1M
CD38-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1027-1M
CD138-Beam 1-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1028-1M
CD22-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1029-1M
CD22-TM8-4-1BB-CD3ζ	1x10 ⁶ /vial	PM-CAR1030-1M
BCMA-4-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1031-1M
CD4-Beam 1-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1032-1M
Humanized BCMA-2-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1033-1M
Mouse ROR-1-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1034-1M
CD19-CD22-4-1BB-CD3ζ	1x10 ⁶ /vial	PM-CAR1035-1M
Humanized CEA-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1036-1M
BCMA-4-TM8-4-1BB-CD3ζ	1x10 ⁶ /vial	PM-CAR1037-1M
NGFR-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1038-1M
MCAM-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1039-1M
CD47-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1040-1M
Humanized CD47-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1041-1M
Humanized 1-CD19-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1042-1M
Humanized 1 CD19-Beam 1-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1043-1M
Human ROR1-TM28-4-1BB-CD3ζ	1x10 ⁶ /vial	PM-CAR1044-1M
PDL-1-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1045-1M
CD123-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1046-1M
CD22-Beam 2-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1047-1M
CD19-Beam 2-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1048-1M
CD19-CD22-4-1BB-CD3-T2A-tEGFR (Suicide switch)	1x10 ⁶ /vial	PM-CAR1049-1M
CD19-CD22-4-1BB-CD3-T2A-RQR8 (Ritiximab suicide switch)	1x10 ⁶ /vial	PM-CAR1050-1M
BCMA-2-TM-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1051-1M
CD37-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1052-1M
CD37-TM28-4-1BB-CD3ζ	1x10 ⁶ /vial	PM-CAR1053-1M
CD19-TM28-GITR-CD3ζ	1x10 ⁶ /vial	PM-CAR1054-1M
CD19-TM8-GITR-CD3ζ	1x10 ⁶ /vial	PM-CAR1055-1M
CD33-Beam 2-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1056-1M
CS1-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1057-1M
B7H4-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1058-1M
CD24-TM28-CD28-CD3ζ	1x10 ⁶ /vial	PM-CAR1059-1M
Mesothelin-TM28-CD28-4-1BB-CD3ζ	1x10 ⁶ /vial	PM-CAR1060-1M
3x Beam 2-TM28-CD28-CD3ζ (Mock)	1x10 ⁶ /vial	PM-CAR1061-1M

Cell Lines

Description	Pack Size	Cat. No.
PD-L1 - CHO Recombinant Cell Line	2 vials	60543
CD47-CHO-K1 Cell line	2 vials	60602
CD47 - HEK293 Cell Line	2 vials	71249
BCMA CHO Recombinant Cell Line (High Expression)	2 vials	79500-H
BCMA CHO Recombinant Cell Line (Low Expression)	2 vials	79500-L
BCMA CHO Recombinant Cell Line (Medium Expression)	2 vials	79500-M
ICOSL (B7-H2) -CHO Recombinant Cell Line	2 vials	79635
CD123 (IL3Ra)-CHO Recombinant Cell Line (High Expression)	2 vials	79640-H
CD123 (IL3Ra)-CHO Recombinant Cell Line (Low Expression)	2 vials	79640-L
CD123 (IL3Ra)-CHO Recombinant Cell Line (Medium Expression)	2 vials	79640-M
PMSA (FOLH1) - CHO Recombinant Cell Line (High Expression)	2 vials	79641-H
PMSA (FOLH1) - CHO Recombinant Cell Line (Low Expression)	2 vials	79641-L
PMSA (FOLH1) - CHO Recombinant Cell Line (Medium Expression)	2 vials	79641-M
BCMA / Luciferase - CHO Recombinant Cell Line	2 vials	79724

Non-Transduced T Cells

The non-transduced T cells are available in frozen vials that can be activated and expanded with CD28/CD3 beads and used as a negative control in all assays with CAR-T cells. We have non-transduced T cells available from different donors that can be used in assays to test individual differences among different donors.

Description	Pack Size	Cat. No.
Non-transduced T-cells, healthy donor	1x10 ⁶ /vial	PM-CAR2003
Non-transduced T-cells, ALL	1x10 ⁶ /vial	PM-CAR2004
Non-transduced T-cells, CLL	1x10 ⁶ /vial	PM-CAR2005
Non-transduced T-cells, NHL	1x10 ⁶ /vial	PM-CAR2006
Non-transduced T cells CD4+ T cells	1x10 ⁶ /vial	PM-CAR2007
Non-transduced T cells CD8+ T cells	1x10 ⁶ /vial	PM-CAR2008
Non-transduced T CD4+ Tcm cells	1x10 ⁶ /vial	PM-CAR2009
Non-transduced CD4+ Tem cells	1x10 ⁶ /vial	PM-CAR2010
Non-transduced Tnaïve cells	1x10 ⁶ /vial	PM-CAR2011
Non-transduced Tcm cells	1x10 ⁶ /vial	PM-CAR2012

Engineered CAR-T Target Cells

We offer several target cell lines that can be used in cytotoxicity assays with CAR-T effector cells. These cells express tumor antigen that is overexpressed in malignant cells, can have GFP or luciferase for *in vivo studies*.

Description	Marker	Pack Size	Cat. No.
Raji-GFP stable expression	CD19+, eGFP	1x10 ⁶ /vial	PM-Raji-GFP
Jurkat-GFP stable expression	CD19-, eGFP	1x10 ⁶ /vial	PM-Jurkat-GFP
K562-GFP stable expression	CD19-, eGFP	1x10 ⁶ /vial	PM-K562-GFP
HeLa-CD19 stable expression	CD19+	1x10 ⁶ /vial	PM-HELA-CD19
CHO-CD19 stable expression	CD19+	1x10 ⁶ /vial	PM-CHO-CD19
CHO-CD47 stable expression	CD47	1x10 ⁶ /vial	PM-CHO-CD47
BxPC3-GFP+-LUC+ stable expression	GFP, LUC	1x10 ⁶ /vial	PM-BxPC3-GFP+-LUC+
CHO-BCMA stable expression	BCMA	1x10 ⁶ /vial	PM-CHO-BCMA
CHO-CD22 stable expression	CD22	1x10 ⁶ /vial	PM-CHO-CD22
CHO-CS1 stable expression	CS1	1x10 ⁶ /vial	PM-CHO-CS1
RPMI8226-GFP+-LUC+ stable expression	GFP, LUC	1x10 ⁶ /vial	PM-RPMI8226-GFP+-LUC+
GFP+-LUC+ stable expression	GFP, LUC	1x10 ⁶ /vial	PM-H929-GFP+-LUC+
SKOV-3-GFP+-LUC+ stable expression	GFP, LUC	1x10 ⁶ /vial	PM-SKOV-3-GFP+-LUC+

PBMC

Peripheral blood mononuclear cells (PBMCs) isolated from patients.

Description	Pack Size	Cat. No.
PBMC, ALL	1x10 ⁶ /vial	PM-CAR3000
PBMC-CLL	1x10 ⁶ /vial	PM-CAR3001
PBMC-NHL	1x10 ⁶ /vial	PM-CAR3002

CAR-T Detection Antibodies

Monoclonal antibodies for staining Beam 1 and Beam 2 tags by flow cytometry.

Description	Pack Size	Cat. No.
Beam 1 Antibody	1 vial	PM-Ab001
Beam 2 Antibody	1 vial	PM-Ab002

Assays & Proteins

Description	Pack Size	Cat. No.
CD123, Fc-Fusion (IgG1) Avi-Tag, Biotin-Labeled	50 µg	100068
ROR1, GST-tag	10 µg	40396
CD47, His-tag	100 µg	71127
CD47, Fc fusion, Biotin-labeled	50 µg	71169
CD47, Fc fusion	100 µg	71177
CD38, His-Tag (Human), HiP™	100 µg	71277
CD47, Fc-Fusion, Streptavidin-Labeled (Human) HiP™	100 µg	71292
CD38, His-Tag, APC-labeled	100 µg	71883
CD30, Fc-Fusion (IgG1), Avi-Tag, Biotin-Labeled	50 µg	72511
CD47, Fc Fusion, Avi-Tag, Biotin-Labeled (Mouse)	50 µg	72514
CD47, Fc fusion, Avi-Tag (Human) HiP™	100 µg	79051
CD38, His-Tag (Mouse), HiP™	100 µg	79070
CD47 (Monkey), Fc Fusion (Human), Avi-Tag HiP™	100 µg	79118
CD47 (Monkey), Fc Fusion (Human), Avi-Tag, Biotin HiP™	50 µg	79302
CD22, Fc-fusion, Avi-Tag HiP™	100 µg	79464
BCMA, Fc-Fusion, Avi-Tag HiP™	100 µg	79465
CD22, Fc-fusion, Avi-Tag, Biotin-labeled HiP™	50 µg	79466
BCMA, Fc-fusion (IgG1), Avi-Tag, Biotin-Labeled HiP™	50 µg	79467
CD19, Fc-Fusion (IgG1), Avi-Tag	100 µg	79472
CD19, Fc-Fusion (IgG1), Avi-Tag, Biotin-Labeled	50 µg	79475
ROR1, Fc-Fusion (IgG1), Avi-Tag	10 µg	79481
ROR1, Fc-Fusion (IgG1), Avi-Tag, Biotin-Labeled	10 µg	79482
BCMA:APRIL[Biotinylated] Inhibitor Screening Assay Kit	96 reactions	79722