proteintech®

CAR Detection Reagents

Reliable and Scalable Solutions for the Detection and Quantification of Chimeric Antigen Receptor (CAR) Engineered Cells

Proteintech's comprehensive range of CAR detection reagents enables accurate quantification and monitoring of CAR expression on CAR-engineered cells. These products are designed for high sensitivity, lot-to-lot consistency, and compatibility with various workflows. CAR detection reagents are well suited for **verification**, **in-process analytics**, and **release testing** of the manufactured clinical product.

Recombinant manufacturing
Recombinant manufacturing ensures improved specificity, higher lot-to-lot consistency and reliable supply

Multi application specific
Compatible with flow cytometry, immunofluorescence, and IHC-based applications for seamless integration into multiple workflows

Powered with FcZero technology
FcZero technology abolishes nonspecific FcγR interactions and eliminates the need for additional blocking steps in flow cytometry

Universal CAR Detection Reagents

Detects a broad range of CAR constructs through the precise recognition of the scFv linker region. This allows reliable identification and quantification of CAR expression independent of target specificity.

- Broad CAR coverage with two universal reagents
- Flexible for current and future CAR designs
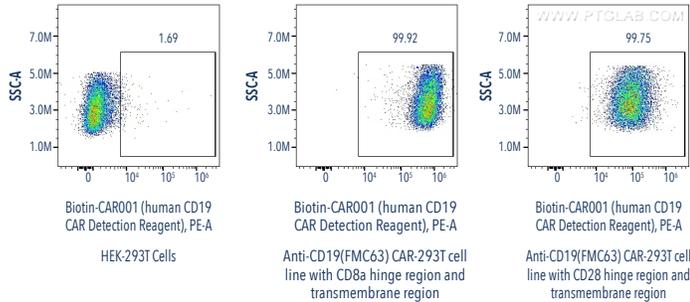- Easier standardization across programs
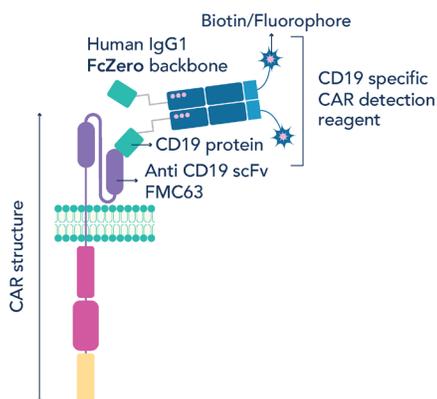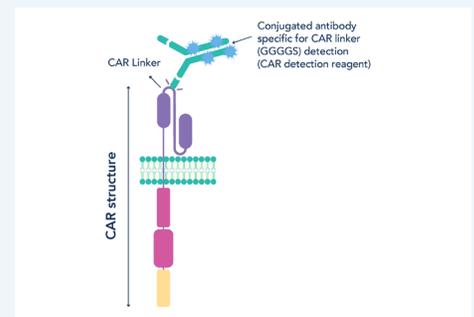
Target Specific CAR Detection Reagents

Target-Specific CAR Detection Reagents are designed for precise and reliable detection of CAR constructs by flow cytometry. By incorporating a native target protein fused to a human IgG1 backbone, these reagents bind directly and with high affinity to the CAR scFv target-binding domain, delivering clear, reproducible staining profiles that:
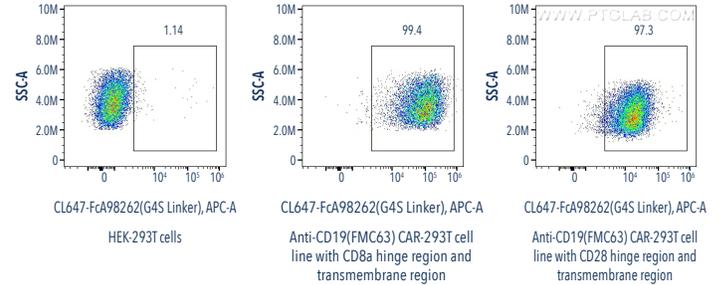
- Confirm CAR expression and functional target engagement
- Improves construct and clone selection
- Aligns with potency and comparability requirements

When you need it all.

Flow Cytometry Validation of Universal CAR Detection Reagent

Biotin-CAR001 (human CD19 CAR Detection Reagent), PE-A

HEK-293T Cells

Biotin-CAR001 (human CD19 CAR Detection Reagent), PE-A

Anti-CD19(FMC63) CAR-293T cell line with CD8a hinge region and transmembrane region

Biotin-CAR001 (human CD19 CAR Detection Reagent), PE-A

Anti-CD19(FMC63) CAR-293T cell line with CD28 hinge region and transmembrane region

Anti-CD19 (FMC63) CAR with CD28 and transmembrane region transfected HEK-293T cells were surface stained with 0.25 ug CoraLite® Plus 647 Anti-GGGGS Linker Rabbit RecAb (CL647-FcA98262, Clone:242306C8). Cells were not fixed.

Flow Cytometry Validation of CD19 CAR Detection Reagent

CL647-FcA98262(G4S Linker), APC-A

HEK-293T cells

CL647-FcA98262(G4S Linker), APC-A

Anti-CD19(FMC63) CAR-293T cell line with CD8a hinge region and transmembrane region

CL647-FcA98262(G4S Linker), APC-A

Anti-CD19(FMC63) CAR-293T cell line with CD28 hinge region and transmembrane region

Anti-CD19 (FMC63) CAR pool with CD28 and transmembrane region transfected HEK-293T cells were surface stained with 0.25 ug FcZero-CAR™ Biotin-human CD19 CAR Detection Reagent (Biotin-CAR001) and PE Streptavidin (Cat.No. PF00021). Cells were not fixed.

Universal CAR Detection Reagents

Catalog No.	Target	Clone	Application
Biotin FcA98262	GGGGS Linker	242306C8	FC, ELISA
98262-1-RR	GGGGS Linker	242306C8	WB, IHC, IF/ICC, FC
98272-2-RR	GGGGS Linker	252007G8	WB, FC
98672-2-RR	Whitlow/218 Linker	252007G8	WB, FC

Target Specific CAR Detection Reagents

Catalog No.	Target	Reactivity	Application
Biotin-CAR001	CD19	Human	FC
Biotin-CAR003	CD22	Human	FC
Biotin-CAR004	CD30	Human	FC
Biotin-CAR005	CD33	Human	FC
Biotin-CAR006	CD38	Human	FC
PE-CAR010	PE-ROR1	Human	FC

Coming Soon
50 more target specific CAR detection reagents