

# CD28 Recombinant Mouse Monoclonal Antibody (CD28.2)

Product Details	
Size	100 µg
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Expression system	Expi293
Class	Recombinant Monoclonal
Type	Antibody
Clone	CD28.2
Conjugate	Unconjugated
Form	Liquid
Concentration	1.0 mg/mL
Purification	Protein A/G
Storage buffer	PBS, pH 7.4
Contains	0.09% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_2942253

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	0.025 µg/test	-

## Product Specific Information

Recombinant antibodies are produced using specific genes that code for the desired antibodies. These genes are cloned into an expression vector and expressed in vitro. The advantages of recombinant antibodies include better specificity and lot-to-lot consistency.

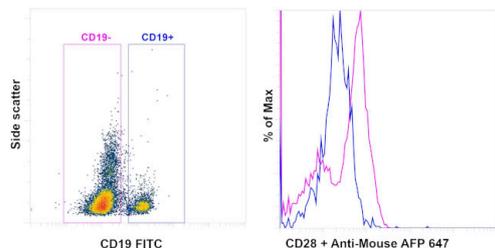
**Description:** The CD28.2 recombinant mouse monoclonal antibody reacts with the human CD28 molecule, a 44 kDa homodimer expressed by thymocytes, mature T cells and plasma cells. CD28 is a ligand for CD80 (B7-1) and CD86 (B7-2) and is a potent co-stimulator of T cells. Signaling through CD28 augments IL-2 and IL-2 receptor expression as well as cytotoxicity of CD3-activated T cells.

**Applications Reported:** The CD28.2 recombinant mouse monoclonal antibody has been reported for use in flow cytometric analysis. CD28.2 has also been reported in costimulation of T cells in in vitro functional assays.

**Applications Tested:** The CD28.2 recombinant mouse monoclonal antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 0.025 µg/test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

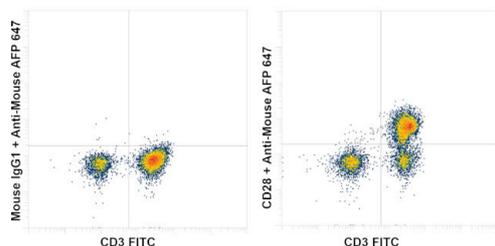
**Filtration:** 0.2 µm post-manufacturing filtered.

## Product Images For CD28 Recombinant Mouse Monoclonal Antibody (CD28.2)



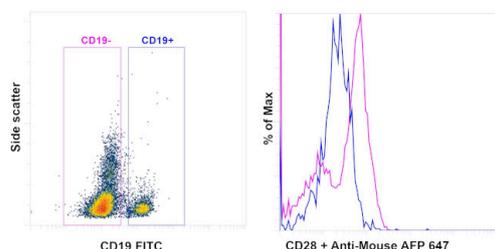
### CD28 Antibody (740009M)

Antibody specificity was demonstrated by relative expression. CD28 Recombinant Mouse Monoclonal Antibody (CD28.2), purified (Product # 7400009M) specifically stains the CD19 negative (CD19-) subset of human PBMCs (pink histogram) while negligible CD28 staining is seen in CD19 positive (CD19+) subset of PBMCs (blue histogram). {RE}



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### CD28 Antibody (740009M) in Flow

CD28 expression was assessed within CD19 negative (CD19-) and CD19 positive (CD19+) subsets of human PBMCs by staining the cells with CD19 FITC (Product # 11-0199-42) and 0.025  $\mu$ g of CD28 Recombinant Mouse Monoclonal Antibody (CD28.2), Purified (Product # 7400009M), followed by Goat anti-Mouse IgG (H+L) Alexa Fluor™ Plus 647 (Product # A55060). Specific CD28 staining was observed in CD19- subset (pink histogram) while negligible CD28 staining was seen in the CD19+ subset (blue histogram). Viable cells in the lymphocyte gate were used for analysis, as determined by Fixable Viability Dye eFluor™ 450 (Product # 65-0863-18). The flow cytometry data was acquired using Attune™ NxT Flow Cytometer (Product # A29004).

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