

CD28 Monoclonal Antibody (CD28.2), Functional Grade, eBioscience™

Product Details	
Size	50 µg
Species Reactivity	Human
Published Species	Fruit fly, Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	CD28.2
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4°C
RRID	AB_468926

Applications	Tested Dilution	Publications
Western Blot (WB)	-	4 Publications
Flow Cytometry (Flow)	1 µg/test	50 Publications
ELISA (ELISA)	-	2 Publications
Functional Assay (Functional)	Assay-Dependent	34 Publications
T-Cell Activation (TCA)	-	4 Publications
Affinity Purification (AP)	-	2 Publications
In vitro Assay (IV)	-	6 Publications
Miscellaneous PubMed (Misc)	-	9 Publications

Product Specific Information

Description: The CD28.2 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 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 antibody has been tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at less than or equal to 1 µg per 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

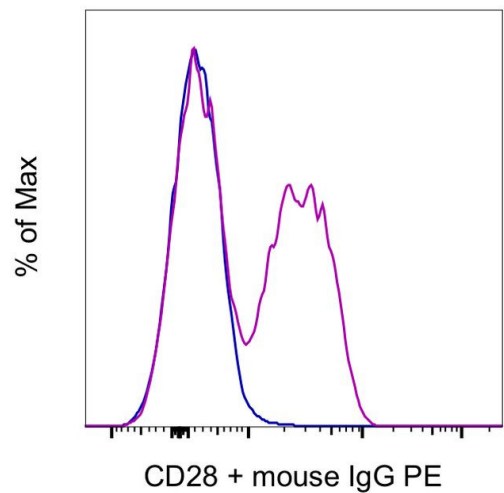
Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

Product Images For CD28 Monoclonal Antibody (CD28.2), Functional Grade, eBioscience™



CD28 Antibody (16-0289-81) in Flow
Normal human peripheral blood cells were stained with 0.5 µg of Mouse IgG1 kappa Isotype Control (Product # 14-4714-82) (blue histogram) or 0.5 µg of CD28 Monoclonal Antibody, Functional Grade (purple histogram) followed by IgG Polyclonal Antibody, PE (Product # 12-4010-87). Cells in the lymphocyte gate were used for analysis.

Western Blot (4)

Frontiers in immunology	Year 2021
Oxidation of HMGB1 Is a Dynamically Regulated Process in Physiological and Pathological Conditions.	Species Human
"16-0289 was used in Western Blotting to analyze the expression of HMGB1 redox isoforms in different inflammatory conditions in skeletal muscle."	
Authors: Ferrara M,Chialli G,Ferreira LM,Ruggieri E,Careccia G,Preti A,Piccirillo R,Bianchi ME,Sitia G,Venereau E	
The Journal of cell biology	Year 2020
PD-1 and BTLA regulate T cell signaling differentially and only partially through SHP1 and SHP2.	Species Human
"16-0289-81 was used in Western Blot, Flow Cytometry to compare the abilities of BTLA and PD-1 to recruit effector molecules and to regulate T cell signalling."	
Authors: Xu X,Hou B,Fulzele A,Masubuchi T,Zhao Y,Wu Z,Hu Y,Jiang Y,Ma Y,Wang H,Bennett EJ,Fu G,Hui E	

[View more WB references on thermofisher.cn](#)

Flow Cytometry (50)

Nature neuroscience	Year 2023
A genome-wide in vivo CRISPR screen identifies essential regulators of T cell migration to the CNS in a multiple sclerosis model.	Species Human
"16-0289-81 was used in Flow Cytometry to reveal key regulators of the fundamental step in the induction of MS lesions."	
Authors: Kendirli A,de la Rosa C,Lämmle KF,Eglseer K,Bauer IJ,Kavaka V,Winklmeier S,Zhuo L,Wichmann C,Gerdes LA,Kümpfel T,Dornmair K,Beltrán E,Kerschensteiner M,Kawakami N	
Nature communications	Year 2023
TIGIT can inhibit T cell activation via ligation-induced nanoclusters, independent of CD226 co-stimulation.	Species Human
"16-0289-81 was used in Flow cytometry/Cell sorting to provide evidence that TIGIT directly inhibits lymphocyte activation, acting independently of CD226, requiring intracellular signalling that is proximal to the TCR."	
Authors: Worboys JD,Vowell KN,Hare RK,Ambrose AR,Bertuzzi M,Conner MA,Patel FP,Zammit WH,Gali-Moya J,Hazime KS,Jones KL,Rey C,Jonjic S,Rovis TL,Tannahill GM,Cruz De Matos GDS,Waigh JD,Davis DM	

[View more Flow references on thermofisher.cn](#)

More applications with references on thermofisher.cn

- ELISA (2)
- Functional (34)
- TCA (4)
- AP (2)
- IV (6)
- Misc (9)

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