

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	37 Publications
ELISA (ELISA)	-	2 Publications
Functional Assay (FN)	Assay-Dependent	32 Publications
T-Cell Activation (TCA)	-	3 Publications
In vitro Assay (IV)	-	5 Publications
Miscellaneous PubMed (Misc)	-	3 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.

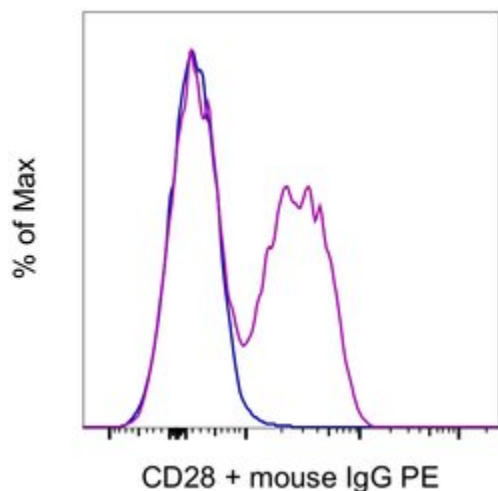
Filtration: 0.2 µm post-manufacturing filtered.

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

Oxidation of HMGB1 Is a Dynamically Regulated Process in Physiological and Pathological Conditions.

"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

Species
Human

Dilution
Not Cited

Year
2021

The Journal of cell biology

PD-1 and BTLA regulate T cell signaling differentially and only partially through SHP1 and SHP2.

"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

Species
Human

Dilution
Not Cited

Year
2020

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

Flow Cytometry (37)

Journal of innate immunity

Downregulation of miRNA-451a Promotes the Differentiation of CD4+ T Cells towards Th2 Cells by Upregulating ETS1 in Childhood Asthma.

"16-0289 was used in Flow cytometry/Cell sorting to investigate the role of miRNA-451a in regulating ETS1 expression in CD4+ T cell."

Authors: Wang T, Zhou Q, Shang Y

Species
Human

Dilution
Not Cited

Year
2021

Frontiers in immunology

IL-12-Induced Immune Suppressive Deficit During CD8+ T-Cell Differentiation.

"16-0289 was used in Flow cytometry/Cell sorting to provide insights into the role of T-cell differentiation in CD8 suppressive biology and may reveal therapeutically targetable pathways to reverse suppressive deficit during immune-mediated disease."

Authors: Renavikar PS, Sinha S, Brate AA, Borcherding N, Crawford MP, Steward-Tharp SM, Karandikar NJ

Species
Human

Dilution
Not Cited

Year
2021

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

More applications with references on thermofisher.com

ELISA (2)

FN (32)

TCA (3)

IV (5)

Misc (3)

For Research Use Only. Not for use in diagnostic procedures. Not for resale without express authorization. Products are warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Production documentation, specifications and/or accompanying package inserts ("Documentation"). No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the Buyer. Any model or sample furnished to Buyer is merely illustrative of the general type and quality of goods and does not represent that any Product will conform to such model or sample. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, ARE GRANTED INCLUDING WITHOUT LIMITATION, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR NON INFRINGEMENT. BUYER'S EXCLUSIVE REMEDY FOR NON-CONFORMING PRODUCTS DURING THE WARRANTY PERIOD IS LIMITED TO REPAIR, REPLACEMENT OF OR REFUND FOR THE NON-CONFORMING PRODUCT(S) AT SELLER'S SOLE OPTION. THERE IS NO OBLIGATION TO REPAIR, REPLACE OR REFUND FOR PRODUCTS AS THE RESULT OF (I) ACCIDENT, DISASTER OR EVENT OF FORCE MAJEURE, (II) MISUSE, FAULT OR NEGLIGENCE OF OR BY BUYER, (III) USE OF THE PRODUCTS IN A MANNER FOR WHICH THEY WERE NOT DESIGNED, OR (IV) IMPROPER STORAGE AND HANDLING OF THE PRODUCTS. Unless otherwise expressly stated on the Product or in the documentation accompanying the Product, the Product is intended for research only and is not to be used for any other purpose, including without limitation, unauthorized commercial uses, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses, or any type of consumption by or application to human or animals.