

CD28 Monoclonal Antibody (37.51), Functional Grade, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Mouse
Published Species	Mouse, Human
Host/Isotype	Syrian hamster / IgG
Recommended Isotype Control	Syrian Hamster IgG Isotype Control, Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	37.51
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_468921

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (IHC)	-	1 Publication
Flow Cytometry (Flow)	0.5 µg/test	64 Publications
ELISA (ELISA)	-	2 Publications
Functional Assay (Functional)	Assay-Dependent	79 Publications
Inhibition Assays (IA)	-	1 Publication
T-Cell Activation (TCA)	-	8 Publications
Affinity Purification (AP)	-	1 Publication
In vitro Assay (IV)	-	13 Publications
Miscellaneous PubMed (Misc)	-	5 Publications

Product Specific Information

Description: The 37.51 monoclonal antibody reacts with the mouse CD28 molecule, a 45 kDa homodimer expressed by thymocytes, mature T cells and NK cells. CD28 is a ligand for CD80 (B7-1) and CD86 (B7-2) and is a potent costimulator 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 37.51 antibody has been reported for use in flow cytometric analysis. 37.51 has also been reported in costimulation of T cells in vitro and in vivo .

Applications Tested: The 37.51 antibody has been tested by flow cytometric analysis of mouse splenocytes. This can be used

at less than or equal to 0.5 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.

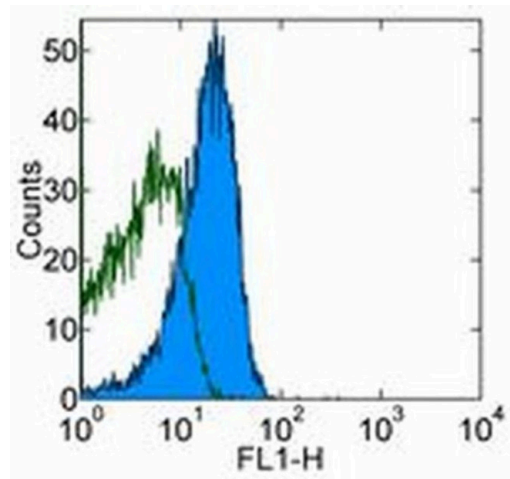
Filtration: 0.2 µm post-manufacturing filtered.

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 (37.51), Functional Grade, eBioscience™



CD28 Antibody (16-0281-82) in Flow

Staining of BALB/c thymocytes with 0.25 µg of Golden Syrian Hamster IgG Isotype Control Functional Grade Purified (Product # 16-4914-85) (open histogram) or 0.25 µg of Anti-Mouse CD28 Functional Grade Purified (filled histogram) followed by Anti-Golden Syrian Hamster IgG FITC (Product # 11-4211-85). Cells in the lymphocyte gate were used for analysis.

Western Blot (1)

Science advances	Year 2020
FOXO1 deficiency impairs proteostasis in aged T cells.	Species Human
"16-0281 was used in Cell Culture to show that FOXO1 promotes lysosome function through the induction of the key transcription factor for lysosomal proteins, TFEB."	
Authors: Jin J,Li X,Hu B,Kim C,Cao W,Zhang H,Weyand CM,Goronzy JJ	

Immunohistochemistry (1)

Nature	Year 2017
Metabolic control of T_H17 and induced T_{reg} cell balance by an epigenetic mechanism.	Species Mouse
"16-0281-82 was used in Immunohistochemistry, Flow Cytometry, Functional Assay to investigate T helper 17 cell differentiation and fate."	
Authors: Xu T,Stewart KM,Wang X,Liu K,Xie M,Ryu JK,Li K,Ma T,Wang H,Ni L,Zhu S,Cao N,Zhu D,Zhang Y, Akassoglou K,Dong C,Driggers EM,Ding S	

Flow Cytometry (64)

JCI insight	Year 2023
Regulatory factor X1 induces macrophage M1 polarization by promoting DNA demethylation in autoimmune inflammation.	Species Human
"16-0281-82 was used in Flow Cytometry to identify a potential RFX1 inhibitor, adenosine diphosphate (ADP), providing a potential strategy for treating autoimmune diseases."	
Authors: Yang S,Du P,Cui H,Zheng M,He W,Gao X,Hu Z,Jia S,Lu Q,Zhao M	

iScience	Year 2023
Targeting adrenergic receptors to mitigate invariant natural killer T cells-induced acute liver injury.	Species Mouse
"16-0281-82 was used in Flow Cytometry to suggest that the modulation of the adrenergic signaling can be a complementary approach to GC-based immunotherapy to mitigate iNKT-induced liver injury without compromising its antitumoral activity."	
Authors: Gonzatti MB,Freire BM,Antunes MM,de Menezes GB,Talbot J,Peron JPS,Basso AS,Keller AC	

View more Flow references on thermofisher.cn

More applications with references on thermofisher.cn

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- Functional (79)
- IA (1)
- TCA (8)
- AP (1)
- IV (13)
- Misc (5)

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