

FITC anti-human CD80 Antibody

Catalog# / Size	305205 / 25 tests 305206 / 100 tests
Clone	2D10
Regulatory Status	RUO
Workshop	VI CD80.1
Other Names	B7-1, B7, BB1
Isotype	Mouse IgG1, κ
Description	CD80, also known as B7-1, B7, and BB1, is a 60 kD single chain type I glycoprotein belonging to the immunoglobulin superfamily. CD80 is expressed on activated B and T cells, macrophages, and dendritic cells. CD80 binds to CD28 and CD152 (CTLA-4). Along with CD86, CD80 plays a critical role in regulation of T cell activation. The interaction of CD80 with CD28 provides a potent costimulatory signal for T cell activation through the CD3 complex, while its interaction with CTLA-4 provides an inhibitory signal for T cell activation.

Product Details

Verified Reactivity	Human
Reported Reactivity	Rhesus
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood.
Excitation Laser	Blue Laser (488 nm)
Application Notes	Additional reported applications (for the relevant formats) include: <i>in vitro</i> blocking of T cell activation, immunohistochemical staining of acetone-fixed frozen tissue sections ² , immunoprecipitation, and Western blotting ³ . The Ultra-LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. Nos. 305245 & 305246).
Application References	<ol style="list-style-type: none"> 1. Kishimoto T, <i>et al.</i> Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London. 2. Battifora M. 1998. <i>J. Clin. Endocr. Metab.</i> 83:4130. (IHC) 3. Van der Merwe PA, <i>et al.</i> 1997. <i>J. Exp. Med.</i> 185:3. (WB) 4. Jayakumar A, <i>et al.</i> 2008. <i>Infect. Immun.</i> 76:2138. PubMed 5. Schubert DA, <i>et al.</i> 2012. <i>J. Exp Med.</i> 209:335. PubMed 6. Wen T, <i>et al.</i> 2014. <i>J Immunol.</i> 192:5481. PubMed
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> 1. Bauer J, <i>et al.</i> 2022. <i>Nat Commun.</i> 13:6401. PubMed 2. Kan S, <i>et al.</i> 2020. <i>Int J Oncol.</i> 57:1047. PubMed

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RRID AB_314501 (BioLegend Cat. No. 305205)
 AB_314502 (BioLegend Cat. No. 305206)

Antigen Details

Structure	Ig superfamily, type I transmembrane glycoprotein, 60 kD
Distribution	Activated B cells and T cells, macrophages, and dendritic cells
Function	T cell costimulation
Ligand/Receptor	CD28, CD152 (CTLA-4)
Cell Type	B cells, Dendritic cells, Macrophages, T cells, Tregs
Biology Area	Cell Biology, Costimulatory Molecules, Immunology, Neuroscience, Neuroscience Cell Markers
Molecular Family	CD Molecules, Immune Checkpoint Receptors
Antigen References	<ol style="list-style-type: none"> 1. Freeman G, <i>et al.</i> 1991. <i>J. Exp. Med.</i> 174:625. 2. Linsley P, <i>et al.</i> 1996. <i>Immunity</i> 4:535. 3. Linsley P, <i>et al.</i> 1991. <i>J. Exp. Med.</i> 174:561.
Gene ID	941

Related Protocols

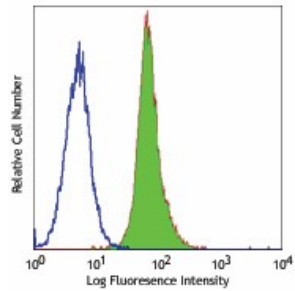
[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Biotin anti-human CD80, FITC anti-human CD80, PE anti-human CD80, PE/Cyanine5 anti-human CD80, Purified anti-human CD80, Alexa Fluor® 488 anti-human CD80, Alexa Fluor® 647 anti-human CD80, PE/Cyanine7 anti-human CD80, APC anti-human CD80, Brilliant Violet 650™ anti-human CD80, Brilliant Violet 421™ anti-human CD80, Brilliant Violet 605™ anti-human CD80, PE/Dazzle™ 594 anti-human CD80, PerCP/Cyanine5.5 anti-human CD80, Brilliant Violet 510™ anti-human CD80, Brilliant Violet 711™ anti-human CD80, Brilliant Violet 785™ anti-human CD80, TotalSeq™-A0005 anti-human CD80, TotalSeq™-B0005 anti-human CD80, TotalSeq™-C0005 anti-human CD80, Ultra-LEAF™ Purified anti-human CD80, Brilliant Violet 750™ anti-human CD80, TotalSeq™-D0005 anti-human CD80

Product Data

Human B-cell Burkitt's lymphoma cell line
Daudi stained with 2D10 FITC



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