Purified anti-mouse CD80 (Maxpar® Ready) Antibody

Catalog# / Size	104735 / 100 µg
Clone	16-10A1
Regulatory Status	RUO
Other Names	B7-1, B7, Ly-53
Isotype	Armenian Hamster IgG
Description	CD80 is a 60 kD highly glycosylated protein. It is a member of the Ig superfamily and is also known as B7-1, B7, and Ly-53. CD80 is constitutively expressed on dendritic cells and monocytes/macrophages, and inducibly expressed on activated B and T cells. The ligation of CD28 on T cells with CD80 and CD86 (B7-2) on antigen presenting cells (such as dendritic cells, macrophages, and B cells) elicits co-stimulation of T cells resulting in enhanced cell activation, proliferation, and cytokine production. CD80 appears to be expressed later in the immune response than CD86. CD80 can also bind to CD152, also known as CTLA-4, to deliver an inhibitory signal to T cells.

Product Details

Verified Reactivity	Mouse
Reported Reactivity	Dog
Antibody Type	Monoclonal
Host Species	Armenian Hamster
Immunogen	CHO cell line transfected with mouse B7 (CD80)
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and EDTA.
Preparation	The antibody was purified by affinity chromatography.
Concentration	1.0 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested CyTOF® - Verified
Recommended Usage	This product is suitable for use with the Maxpar® Metal Labeling Kits. For metal labeling using Maxpar® Ready antibodies, proceed directly to the step to Partially Reduce the Antibody by adding 100 µl of Maxpar® Ready antibody to 100 µl of 4 mM TCEP-R in a 50 kDa filter and continue with the protocol. Always refer to the latest version of Maxpar® User Guide when conjugating Maxpar® Ready antibodies.
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation[2], *in vitro* and *in vivo* blocking of CTLA-4 Ig to CD80 by blocking costimulation of T cells by activated B cells[2-4], and immunohistochemical staining of acetone-fixed frozen sections[1,4]. The Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. Nos. 104747-104752).
Additional Product Notes	Maxpar® is a registered trademark of Standard BioTools Inc.

Application References

(PubMed link indicates BioLegend citation)

1. Harlan DM, *et al.* 1994. *P. Natl. Acad. Sci. USA* 91:3137. (IHC)
2. Razi-Wolf Z, *et al.* 1992. *P. Natl. Acad. Sci. USA* 89:4210. (Block, IP)
3. Hathcock KS, *et al.* 1994. *J. Exp. Med.* 180:631. (Block)
4. Herold KC, *et al.* 1997. *J. Immunol.* 158:984. (Block, IHC)
5. Ma XT, *et al.* 2006. *Cancer Res.* 66:1169.
6. Andoniou CE, *et al.* 2005. *Nature Immunology* 6:1011. (FC)
7. Lawson BR, *et al.* 2007. *J. Immunol.* 178:5366.
8. Turnquist HR, et al. 2007. *J. Immunol.* 178:7018.
9. Misra RS, *et al.* 2010. *J. Exp Med.* 207:1775. PubMed

10. del Rio ML, *et al.* 2011. *Transpl. Int.* 24:501. (FC) PubMed
11. Philipsen L, *et al.* 2013. *Mol Cell Proteomics.* 12:2551. PubMed

Product Citations

1. Martinez LE, *et al.* 2020. J Virol. 94:00:00. PubMed
2. Wei SC *et al.* 2017. Cell. 170(6):1120-1133 . PubMed

RRID AB_2563763 (BioLegend Cat. No. 104735)

Antigen Details

Structure	Ig superfamily, 60 kD
Distribution	Macrophages, activated B cells and T cells, dendritic cells
Function	T cell costimulation
Ligand/Receptor	CD28 (stimulatory), CD152(CTLA4) (inhibitory)
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	1. Barclay AN, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press. 2. Linsley PS, *et al.* 1991. *J. Exp. Med.* 174:561. 3. Salomon B, *et al.* 2001. *Annu. Rev. Immunol.* 19:225.
Gene ID	12519

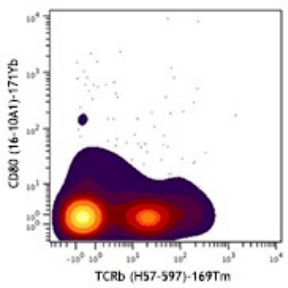
Related Protocols

Cell Surface Flow Cytometry Staining Protocol

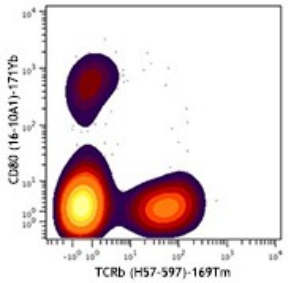
Other Formats

Biotin anti-mouse CD80, FITC anti-mouse CD80, PE anti-mouse CD80, Purified anti-mouse CD80, PE/Cyanine5 anti-mouse CD80, APC anti-mouse CD80, Alexa Fluor® 488 anti-mouse CD80, Alexa Fluor® 647 anti-mouse CD80, PerCP/Cyanine5.5 anti-mouse CD80, Pacific Blue™ anti-mouse CD80, Brilliant Violet 421™ anti-mouse CD80, Brilliant Violet 605™ anti-mouse CD80, Brilliant Violet 650™ anti-mouse CD80, PE/Cyanine7 anti-mouse CD80, Purified anti-mouse CD80 (Maxpar® Ready), PE/Dazzle™ 594 anti-mouse CD80, APC/Fire™ 750 anti-mouse CD80, Brilliant Violet 711™ anti-mouse CD80, Brilliant Violet 510™ anti-mouse CD80, TotalSeq™-A0849 anti-mouse CD80, TotalSeq™-C0849 anti-mouse CD80, Ultra-LEAF™ Purified anti-mouse CD80, Alexa Fluor® 594 anti-mouse CD80, TotalSeq™-B0849 anti-mouse CD80 Antibody, PE/Fire™ 640 anti-mouse CD80, Spark NIR™ 685 anti-mouse CD80

Product Data



Mouse splenocytes were cultured with either media alone (top) or with LPS (bottom) for 4 days and then stained with 171Yb-anti-CD80 (16-10A1) and 169Tm-anti-TCRb (H57-597). Data provided by DVS Sciences.



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