

CD80 (B7-1) Monoclonal Antibody (16-10A1), Super Bright™ 645, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Dog, Mouse, Pig
Host/Isotype	Armenian hamster / IgG
Recommended Isotype Control	Armenian Hamster IgG Isotype Control (eBio299Arm), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	16-10A1
Conjugate	Super Bright™ 645
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2663121

Applications	Tested Dilution	Publications
Immunohistochemistry (IHC)	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.125 µg/test	16 Publications

Product Specific Information

Description: The 16-10A1 monoclonal antibody reacts with mouse CD80 (B7-1), a 55 kDa member of the Ig superfamily. CD80 is expressed by macrophages, dendritic cells and activated B cells. In addition, activated T cells express this antigen. CD80 has high affinity for binding to two T cell surface antigens, CD28 and CD152 (CTLA-4). The interaction of CD28 and CD152 with CD80 is crucial in T-B cell communication leading to activation of T and B cells, respectively.

Applications Reported: This 16-10A1 antibody has been reported for use in flow cytometric analysis.

Applications Tested: This 16-10A1 antibody has been tested by flow cytometric analysis of stimulated mouse splenocytes. This can be used at less than or equal to 0.25 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.

Super Bright 645 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 645 nm. We recommend using a 660/20 bandpass filter. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright

Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

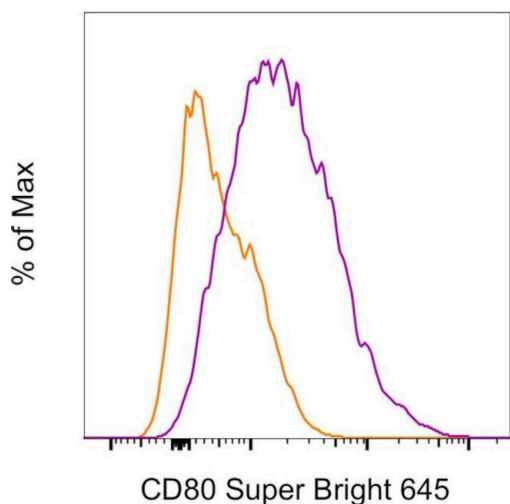
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 μ L of cell sample + 100 μ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 645 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD80 (B7-1) Monoclonal Antibody (16-10A1), Super Bright™ 645, eBioscience™



CD80 (B7-1) Antibody (64-0801-82) in Flow

C57BL/6 mouse splenocytes were unstimulated (orange histogram) or stimulated for 72 hours with LPS (Product # 00-4976-03) (purple histogram). Cells were then stained with 0.125 μ g of CD80 Monoclonal Antibody, Super Bright 645. Total viable cells were used for analysis, as determined by Fixable Viability Dye eFluor 506 (Product # 65-0866-14).

[View more figures on thermofisher.com](https://www.thermofisher.com)

Immunohistochemistry (1)

Experimental and therapeutic medicine

Receptor-selective interleukin-4 mutein attenuates laser-induced choroidal neovascularization through the regulation of macrophage polarization in mice.

"Published figure using CD80 (B7-1) monoclonal antibody (Product # 64-0801-82) in Immunocytochemistry"

Authors: Gao L, Jiang W, Liu H, Chen Z, Lin Y

Year
2021

Immunocytochemistry (1)

Life (Basel, Switzerland)

Bim Expression Promotes the Clearance of Mononuclear Phagocytes during Choroidal Neovascularization, Mitigating Scar Formation in Mice.

"Published figure using CD80 (B7-1) monoclonal antibody (Product # 64-0801-82) in Immunocytochemistry"

Authors: Wang S, Zaitoun IS, Darjatmoko SR, Sheibani N, Sorenson CM

Year
2022

Flow Cytometry (16)

OncoTargets and therapy

Lung Carcinoma Cells Secrete Exosomal MALAT1 to Inhibit Dendritic Cell Phagocytosis, Inflammatory Response, Costimulatory Molecule Expression and Promote Dendritic Cell Autophagy via AKT/mTOR Pathway.

"Published figure using CD80 (B7-1) monoclonal antibody (Product # 64-0801-82) in Flow Cytometry"

Authors: Liu Y, Yin Z, Lu P, Ma Y, Luo B, Xiang L, Zhang W, He Y, Liang X

Year
2022

iScience

Resolving macrophage polarization through distinct Ca^{2+} entry channel that maintains intracellular signaling and mitochondrial bioenergetics.

"Published figure using CD80 (B7-1) monoclonal antibody (Product # 64-0801-82) in Flow Cytometry"

Authors: Nascimento Da Conceicao V, Sun Y, Ramachandran K, Chauhan A, Raveendran A, Venkatesan M, DeKumar B, Maity S, Vishnu N, Kotsakis GA, Worley PF, Gill DL, Mishra BB, Madesh M, Singh BB

Year
2021

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

More applications with references on thermofisher.com

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