

# CD80 (B7-1) Monoclonal Antibody (2D10.4), Super Bright™ 600, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), Super Bright™ 600, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	2D10.4
Conjugate	Super Bright™ 600
Form	Liquid
Concentration	5 µL/Test
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_2784861

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	1 Publication

## Product Specific Information

**Description:** The 2D10.4 monoclonal antibody reacts with human CD80 (B7-1), a 60 kDa member of the Ig superfamily. CD80 is expressed by activated B cells, macrophages and dendritic 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 2D10.4 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This 2D10.4 antibody has been pre-titrated and tested by flow cytometric analysis of Daudi cell line. This can be used at 5 µL (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 10<sup>5</sup> to 10<sup>8</sup> cells/test.

Super Bright 600 is a tandem dye that can be excited with the violet laser line (405 nm) and emits at 600 nm. We recommend using a 610/20 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.

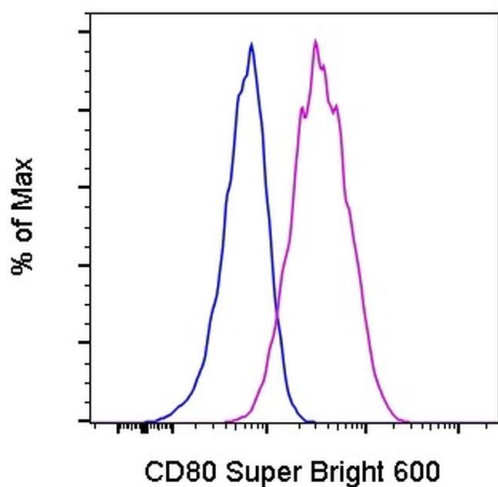
**Light sensitivity:** This tandem dye is sensitive to photo-induced oxidation. Protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 2-8°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorochrome performance after fixation can be made, but clone specific performance should be determined empirically.

Excitation: 405 nm; Emission: 600 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 (2D10.4), Super Bright™ 600, eBioscience™



### CD80 (B7-1) Antibody (63-0809-42) in Flow

Daudi cells were stained with Mouse IgG1 K Isotype Control, Super Bright 600 (Product # 63-4714-82) (blue histogram) or CD80 (B7-1) Monoclonal Antibody, Super Bright 600 (purple histogram). Total viable cells were used for analysis.

## 1 Reference

### Flow Cytometry (1)

PLoS pathogens

#### Response of human macrophages to gamma radiation is mediated via expression of endogenous retroviruses.

"Published figure using CD80 (B7-1) monoclonal antibody (Product # 63-0809-42) in Flow Cytometry"

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**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

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