

# CD80 (B7-1) Monoclonal Antibody (2D10.4), PerCP-eFluor™ 710, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Published Species	Human
Host/Isotype	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), PerCP-eFluor™ 710, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	2D10.4
Conjugate	PerCP-eFluor™ 710
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin, 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_10548359

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	7 Publications
Functional Assay (FN)	-	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.

PerCP-eFluor® 710 emits at 710 nm and is excited with the blue laser (488 nm); it can be used in place of PerCP-Cyanine5.5. We recommend using a 710/50 bandpass filter, however, the 695/40 bandpass filter is an acceptable alternative. Please make sure that your instrument is capable of detecting this fluorochrome.

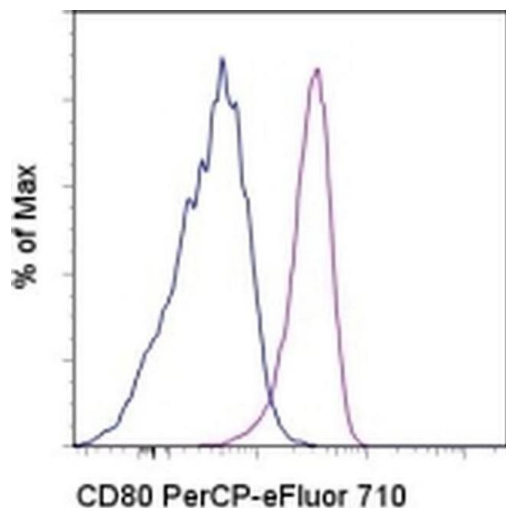
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix

/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: 488 nm; Emission: 710 nm; Laser: Blue Laser.

Filtration: 0.2 µm post-manufacturing filtered.

### Product Images For CD80 (B7-1) Monoclonal Antibody (2D10.4), PerCP-eFluor™ 710, eBioscience™



#### CD80 (B7-1) Antibody (46-0809-42) in Flow

Staining of the Daudi cell line with Mouse IgG1 K Isotype Control PerCP-eFluor® 710 (Product # 46-4714-82) (blue histogram) or Anti-Human CD80 (B7-1) PerCP-eFluor® 710 (purple histogram). Total viable cells were used for analysis.

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

## 8 References

### Flow Cytometry (7)

#### 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 # 46-0809-42) in Flow Cytometry"

Authors: Mikhalkevich N, O'Carroll IP, Tkavc R, Lund K, Sukumar G, Dalgard CL, Johnson KR, Li W, Wang T, Nath A, Iordanskiy S

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2021

#### Cell reports

#### Mesenchymal Stem and Stromal Cells Harness Macrophage-Derived Amphiregulin to Maintain Tissue Homeostasis.

"46-0809-42 was used in Flow Cytometry to demonstrate the role of mesenchymal stem and stromal cell and macrophage cross-talk in post-injury tissue homeostasis in mice."

Authors: Ko JH, Kim HJ, Jeong HJ, Lee HJ, Oh JY

**Species**  
Human

**Dilution**  
Not Cited

**Year**  
2020

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

### Functional Assay (1)

#### The Journal of clinical investigation

#### Renal allograft rejection is prevented by adoptive transfer of anergic T cells in nonhuman primates.

Authors: Bashuda H, Kimikawa M, Seino K, Kato Y, Ono F, Shimizu A, Yagita H, Teraoka S, Okumura K

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2005

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