



CD80 (B7-1) Monoclonal Antibody (2D10.4), PE-Cyanine5, 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), PE-Cyanine5, eBioscience™ |
| Class | Monoclonal |
| Туре | Antibody |
| Clone | 2D10.4 |
| Conjugate | PE-Cyanine5 |
| 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_10596641 |

| Applications | Tested Dilution | Publications |
|-----------------------|------------------|----------------|
| Flow Cytometry (Flow) | 5 μL (1 μg)/test | 4 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: The 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 normal human peripheral blood cells. This can be used at 5 µL (1 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.

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

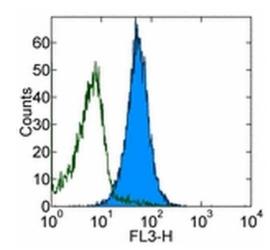
Fixation: Samples can be stored in IC Fixation Buffer (cat. 00-8222) (100 µL cell sample + 100 µL IC Fixation Buffer) or 1-step Fix /Lyse Solution (cat. 00-5333) for up to 3 days in the dark at 4°C with minimal impact on brightness and FRET efficiency /compensation. Some generalizations regarding fluorophore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

performance should be determined empirically.

Excitation: 488-561 nm; Emission: 667 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD80 (B7-1) Monoclonal Antibody (2D10.4), PE-Cyanine5, eBioscience™



CD80 (B7-1) Antibody (15-0809-42) in Flow

Staining of normal human peripheral blood cells with Mouse IgG1 K Isotype Control PE-Cyanine5 (Product # 15-4714-81) (open histogram) or Anti-Human CD80 (B7-1) PE-Cyanine5 (filled histogram). Cells in the lymphocyte gate were used for analysis.

View more figures on thermofisher.com

□ 5 References

Flow Cytometry (4)

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 # 15-0809-42) 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

Nutrients

Astragalus polysaccharides (PG2) Enhances the M1 Polarization of Macrophages, Functional Maturation of Dendritic Cells, and T Cell-Mediated Anticancer Immune Responses in Patients with Lung Cancer.

"Published figure using CD80 (B7-1) monoclonal antibody (Product # 15-0809-42) in Flow Cytometry" Authors: Bamodu OA, Kuo KT, Wang CH, Huang WC, Wu ATH, Tsai JT, Lee KY, Yeh CT, Wang LS

Species

Not Applicable

Dilution Not Cited

Year 2019

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

More applications with references on thermofisher.com

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