

# CD86 (B7-2) Monoclonal Antibody (IT2.2), PE-Cyanine7, eBioscience™

| Product Details             |   |
|-----------------------------|---|
| Size                        | 100 Tests   |
| Species Reactivity          | Human   |
| Published Species           | Human   |
| Host/Isotype                | Mouse / IgG2b, kappa  |
| Recommended Isotype Control | Mouse IgG2b kappa Isotype Control (eBMG2b), PE-Cyanine7, eBioscience™ |
| Class                       | Monoclonal  |
| Type                        | Antibody  |
| Clone                       | IT2.2   |
| Conjugate                   | PE-Cyanine7   |
| Excitation/Emission Max     | 569/780 nm  |
| Form                        | Liquid  |
| Concentration               | 5 µL/Test   |
| Purification                | Affinity chromatography   |
| Storage buffer              | PBS, pH 7.2, with 0.2% BSA  |
| Contains                    | 0.09% sodium azide  |
| Storage conditions          | 4° C, store in dark, DO NOT FREEZE!                                   |
| RRID                        | AB_2573374  |

| Applications          | Tested Dilution      | Publications    |
|-----------------------|----------------------|-----------------|
| Flow Cytometry (Flow) | 5 µL (0.125 µg)/test | 16 Publications |

## Product Specific Information

**Description:** The IT2.2 monoclonal antibody reacts with human CD86, an ~80 kDa surface receptor also known as B7-2. CD86 and CD80 are members of the B7 family of costimulatory molecules. CD86 is expressed at low levels on B cells, macrophages, and dendritic cells and is upregulated on B cells through a variety of surface stimuli including the BCR complex, CD40 and some cytokine receptors. In addition to CD80 (B7-1), CD86 is a counter-receptor for the T cell surface molecules CD28 and CD152 (CTLA-4). The interaction of CD86 with its ligands plays a critical role in T-B crosstalk, T cell costimulation, autoantibody production and Th2-mediated Ig production. The kinetics of upregulation of CD86 upon stimulation supports its major contribution during the primary phase of an immune response.

**Applications Reported:** This IT2.2 antibody has been reported for use in flow cytometric analysis.

**Applications Tested:** This IT2.2 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 µL (0.125 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.

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

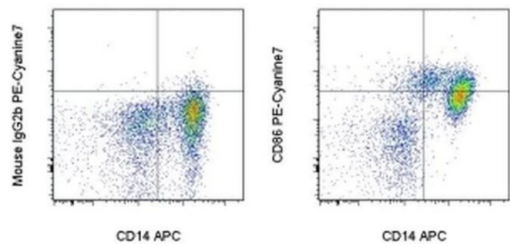
**Fixation:** Samples can be stored in IC Fixation Buffer (Product # 00-822-49) (100 µL of cell sample + 100 µL of IC Fixation

Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333-54) 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: 775 nm; Laser: Blue Laser, Green Laser, Yellow-Green Laser.

Filtration: 0.2 µm post-manufacturing filtered.

Product Images For CD86 (B7-2) Monoclonal Antibody (IT2.2), PE-Cyanine7, eBioscience™



**CD86 (B7-2) Antibody (25-0869-42) in Flow**  
Staining of normal human peripheral blood cells with Anti-Human CD14 APC (Product # 17-0149-42) and Mouse IgG2b K Isotype Control PE-Cyanine7 (Product # 25-4732-81) (left) or Anti-Human CD86 (B7-2) PE-Cyanine7 (right). Cells in the monocyte gate were used for analysis.

[View more figures on thermofisher.com](#)

16 References

Flow Cytometry (16)

|  |  |         |
|--|--|---------|
| International journal of molecular sciences  |  | Year    |
| <b>Engineered Human Dendritic Cell Exosomes as Effective Delivery System for Immune Modulation.</b>  |  | 2023    |
| "25-0869-42 was used in Flow cytometry/Cell sorting to report in a mouse model of periodontitis that custom murine DC-derived exo subtypes could reprogram the immune response toward a bone-sparing or bone-loss phenotype, depending on immune profile." |  | Species |
| Authors: Elsayed R,Elashiry M,Tran C,Yang T,Carroll A,Liu Y,Hamrick M,Cutler CW  |  | Human   |
| PeerJ  |  | Year    |
| <b>SARS-CoV-2 Delta (B.1.617.2) variant replicates and induces syncytia formation in human induced pluripotent stem cell-derived macrophages.</b>  |  | 2023    |
| "Published figure using CD86 (B7-2) monoclonal antibody (Product # 25-0869-42) in Flow Cytometry"  |  |         |
| Authors: Thaweerattanasing T,Wanitchang A,Saenboonrueng J,Srisutthisamphan K,Wanase N,Sungsuwan S, Jongkaewwattana A,Chailangkarn T  |  |         |

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