

# CD86 (B7-2) Monoclonal Antibody (IT2.2), Super Bright™ 645, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG2b, kappa
Recommended Isotype Control	Mouse IgG2b kappa Isotype Control (eBMG2b), Super Bright™ 645, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	IT2.2
Conjugate	Super Bright™ 645
Excitation/Emission Max	414/645 nm
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_2688245

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	5 Publications
Neutralization (Neu)	-	1 Publication

## 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 (0.25 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 10<sup>5</sup> to 10<sup>8</sup> cells/test.

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.

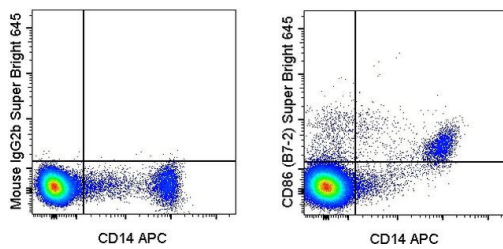
Light sensitivity: This tandem dye is sensitive to photo-induced oxidation. Please protect this vial and stained samples from light.

Fixation: Samples can be stored in IC Fixation Buffer (Product # 00-8222) (100  $\mu$ L of cell sample + 100  $\mu$ L of IC Fixation Buffer) or 1-step Fix/Lyse Solution (Product # 00-5333) for up to 3 days in the dark at 4 degrees 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 CD86 (B7-2) Monoclonal Antibody (IT2.2), Super Bright™ 645, eBioscience™



### CD86 (B7-2) Antibody (64-0869-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD14 APC (Product # 17-0149) and Mouse IgG2b K Isotype Control Super Bright 645 (Product # 64-4732) (left) or Anti-Human CD86 (B7-2) Super Bright 645 (right). Cells in the lymphocyte and monocyte gate were used for analysis.

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

## 6 References

### Flow Cytometry (5)

Cells

#### **TcpC Inhibits M1 but Promotes M2 Macrophage Polarization via Regulation of the MAPK/NF-B and Akt/STAT6 Pathways in Urinary Tract Infection.**

"Published figure using CD86 (B7-2) monoclonal antibody (Product # 64-0869-42) in Flow Cytometry"

Authors: Fang J, Ou Q, Wu B, Li S, Wu M, Qiu J, Cen N, Hu K, Che Y, Ma Y, Pan J

Year  
2022

Cell death & disease

#### **M1 macrophage-derived exosomes and their key molecule lncRNA HOTTIP suppress head and neck squamous cell carcinoma progression by upregulating the TLR5/NF-B pathway.**

"Published figure using CD86 (B7-2) monoclonal antibody (Product # 64-0869-42) in Flow Cytometry"

Authors: Jiang H, Zhou L, Shen N, Ning X, Wu D, Jiang K, Huang X

Year  
2022

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

### Neutralization (1)

PLoS pathogens

#### **Pomalidomide restores immune recognition of primary effusion lymphoma through upregulation of ICAM-1 and B7-2.**

"Published figure using CD86 (B7-2) monoclonal antibody (Product # 64-0869-42) in Neutralization"

Authors: Shrestha P, Davis DA, Jaeger HK, Stream A, Aisabor AI, Yarchoan R

Year  
2021

### More applications with references on thermofisher.com

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