

# CD86 (B7-2) Monoclonal Antibody (IT2.2), Super Bright™ 436, 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), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	IT2.2
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 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_2637395

Applications	Tested Dilution	Publications
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	5 µL (0.25 µg)/test	14 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 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50

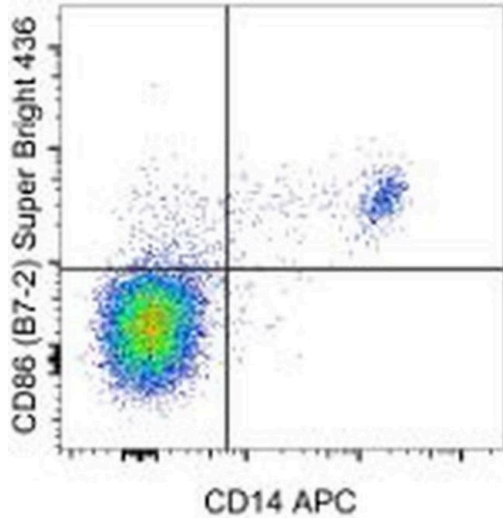
bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

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.

Excitation: 405 nm; Emission: 436 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™ 436, eBioscience™



#### CD86 (B7-2) Antibody (62-0869-42) in Flow

Staining of normal human peripheral blood cells with Anti-Human CD14 APC (Product # 17-0149-42) and Anti-Human CD86 (B7-2) Super Bright 436. Cells in the lymphocyte and monocyte gate were used for analysis.

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

## Immunocytochemistry (1)

Biochemistry and biophysics reports

### Pentraxin-3 regulates the inflammatory activity of macrophages.

"Published figure using CD86 (B7-2) monoclonal antibody (Product # 62-0869-42) in Immunocytochemistry"

Authors: Shiraki A, Kotooka N, Komoda H, Hirase T, Oyama JI, Node K

Year  
2016

Species  
Human

## Flow Cytometry (14)

PeerJ

### SARS-CoV-2 Delta (B.1.617.2) variant replicates and induces syncytia formation in human induced pluripotent stem cell-derived macrophages.

"Published figure using CD86 (B7-2) monoclonal antibody (Product # 62-0869-42) in Flow Cytometry"

Authors: Thaweerattanasinp T, Wanitchang A, Saenboonrueng J, Srisutthisamphan K, Wanasen N, Sungsuwan S, Jongkaewwattana A, Chailangkarn T

Year  
2023

Cells

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

"Published figure using CD86 (B7-2) monoclonal antibody (Product # 62-0869-42) 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

[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 # 62-0869-42) 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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