

CD86 (B7-2) Monoclonal Antibody (PO3.1), Functional Grade, eBioscience™

Product Details	
Size	50 µg
Species Reactivity	Mouse
Published Species	Mouse
Host/Isotype	Rat / IgG2b, kappa
Recommended Isotype Control	Rat IgG2b kappa Isotype Control (eB149/10H5), Functional Grade, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	PO3.1
Conjugate	Functional Grade
Form	Liquid
Concentration	1 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	no preservative
Storage conditions	4° C
RRID	AB_469020

Applications	Tested Dilution	Publications
Western Blot (WB)	-	1 Publication
Immunohistochemistry (Frozen) (IHC (F))	-	1 Publication
Immunocytochemistry (ICC/IF)	-	1 Publication
Flow Cytometry (Flow)	0.25 µg/test	8 Publications
Neutralization (Neu)	Assay-Dependent	1 Publication
Functional Assay (FN)	Assay-Dependent	1 Publication
In vitro Assay (IV)	-	1 Publication

Product Specific Information

Description: The PO3.1 monoclonal antibody reacts with mouse 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 level 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. CD86 is also expressed by activated mouse T cells and thioglycolate-elicited peritoneal cells. 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: The PO3.1 antibody has been reported for use in flow cytometric analysis. It has also been reported in blocking of CD86 in functional studies.

Applications Tested: The PO3.1 antibody has been tested by flow cytometric analysis of resting and activated mouse splenocytes and can be used at 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 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Storage and handling: Use in a sterile environment.

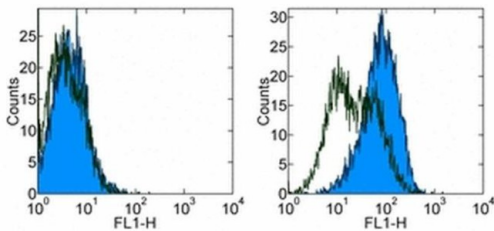
Filtration: 0.2 µm post-manufacturing filtered.

Purity: Greater than 90%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.001 ng/µg antibody, as determined by LAL assay.

Aggregation: Less than 10%, as determined by HPLC.

Product Images For CD86 (B7-2) Monoclonal Antibody (PO3.1), Functional Grade, eBioscience™



CD86 (B7-2) Antibody (16-0861-81) in Flow
Staining of 2-day unstimulated (left) and 2-day LPS activated (right) C57Bl/6 splenocytes with 0.25 µg of Rat IgG2b K Isotype Control Functional Grade Purified (Product # 16-4031-81) (open histogram) or 0.25 µg of Anti-Mouse CD86 (B7-2) Functional Grade Purified (filled histogram) followed by Anti-Rat IgG FITC (Product # 11-4811-85). Total viable cells were used for analysis.

Western Blot (1)

The Journal of biological chemistry CD86 and beta2-adrenergic receptor signaling pathways, respectively, increase Oct-2 and OCA-B Expression and binding to the 3'-IgH enhancer in B cells. "16-0861 was used in Western Blotting to show that CD86 stimulation up-regulates the expression of the transcription factor Oct-2 in a protein kinase C- and NF-kappaB1-dependent manner." Authors: Podojil JR,Kin NW,Sanders VM	Year 2004 Species Mouse
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Immunohistochemistry (Frozen) (1)

Arteriosclerosis, thrombosis, and vascular biology Oral administration of an active form of vitamin D3 (calcitriol) decreases atherosclerosis in mice by inducing regulatory T cells and immature dendritic cells with tolerogenic functions. "16-0861 was used in Immunohistochemistry to demonstrate that immune modulation by calcitriol may be a potentially valuable therapeutic approach against atherosclerosis." Authors: Takeda M,Yamashita T,Sasaki N,Nakajima K,Kita T,Shinohara M,Ishida T,Hirata K	Year 2010 Species Mouse Dilution 1:200
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Immunocytochemistry (1)

Arteriosclerosis, thrombosis, and vascular biology Orally administered eicosapentaenoic acid induces rapid regression of atherosclerosis via modulating the phenotype of dendritic cells in LDL receptor-deficient mice. "16-0861 was used in Immunohistochemistry to investigate the effect of the administration of EPA on the regression of atherosclerosis." Authors: Nakajima K,Yamashita T,Kita T,Takeda M,Sasaki N,Kasahara K,Shinohara M,Rikitake Y,Ishida T,Yokoyama M,Hirata K	Year 2011 Species Mouse Dilution 1:200
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Flow Cytometry (8)

PloS one Allostimulatory Effects of Dendritic Cells with Characteristic Features of a Regulatory Phenotype. "16-0861 was used in Flow cytometry/Cell sorting to generate in culture potentially tolerogenic DC by simultaneously blocking GSK3 by lithium chloride (LiCl) and stimulating TLR2 by PAM3CysSerLys4." Authors: Kouwenberg M,Jacobs CW,van der Vlag J,Hilbrands LB	Year 2017 Species Mouse Dilution 1:80
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[View more Flow references on thermofisher.com](#)

More applications with references on thermofisher.com

- Neu (1)
- FN (1)
- IV (1)

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