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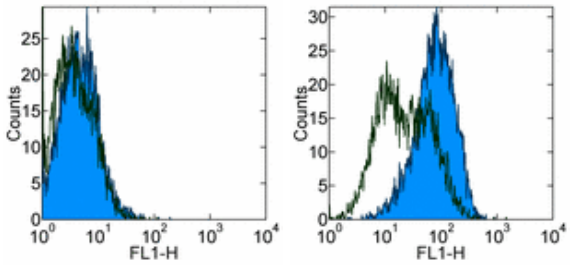
Tel: 888.999.1371 or 858.642.2058
Fax: 858.642.2046
Web: www.ebioscience.com
E-mail: info@ebioscience.com

Product Information

Contents: Functional Grade Purified anti-mouse CD86 (B7-2)
Catalog Number: 16-0861
Sizes: 50 ug, 100 ug, 500 ug, 1 mg
Formulation: Phosphate buffer pH 7.2, 150 mM NaCl, No NaN_3
Storage Conditions: Store at 4°C.
Avoid repeated freeze/thaw cycles.
KEEP CONTENT STERILE.
Endotoxin Level: Less than 0.001 ng/ug antibody, as determined by the LAL assay.
Clone: PO3.1
Isotype: Rat IgG2b, κ



Staining of 2-day unstimulated (left) and 2-day LPS activated (right) C57Bl/6 splenocytes with 0.25 µg of FG Purified Rat IgG2b Iso Cntrl (cat. 16-4331) (open histogram) or 0.25 µg of FG Purified PO3.1 (colored histogram) followed by FITC Anti-Rat IgG (cat. 11-4811). Total viable cells were used for analysis.

Available Formats of This Product

Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
12-0861	PE anti-mouse CD86 (B7-2)	488	575	FC
14-0861	Affinity Purified anti-mouse CD86 (B7-2)	N/A	N/A	FA FC
16-0861	Functional Grade* Purified anti-mouse CD86 (B7-2)	N/A	N/A	FA FC

*Functional Grade™ (FG™): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/µg.
Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

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.

Usage

For research use only, not for diagnostic or therapeutic use. 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 splenocyte suspensions and can be used at 0.5 µg/million cells. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Related Products

Cat. 12-0861 PE anti-mouse CD86 (B7-2) (clone PO3.1)
Cat. 14-0861 Affinity Purified anti-mouse CD86 (B7-2) (clone PO3.1)
Cat. 11-0862 FITC anti-mouse CD86 (B7-2) (clone GL1)
Cat. 12-0862 PE anti-mouse CD86 (B7-2) (clone GL1)
Cat. 13-0862 Biotin anti-mouse CD86 (B7-2) (clone GL1)
Cat. 14-0862 Affinity Purified anti-mouse CD86 (B7-2) (clone GL1)
Cat. 15-0862 PE-Cy5 anti-mouse CD86 (B7-2) (clone GL1)

Cat. 16-0862 Functional Grade Purified anti-mouse CD86 (B7-2) (clone GL1)
Cat. 17-0862 APC anti-mouse CD86 (B7-2) (clone GL1)
Cat. 16-4031 Functional Grade Purified Rat IgG2b Isotype Control (clone eB149/10H5)
Cat. 11-4317 Streptavidin-FITC (Fluorescein isothiocyanate)
Cat. 12-4317 Streptavidin-PE (Phycoerythrin)
Cat. 17-4317 Streptavidin Allophycocyanin (SA-APC)
Cat. 11-4811 FITC Anti-Rat IgG
Cat. 13-4813 Biotin Anti-Rat IgG (clone Polyclonal)

References

Nakajima, A., M. Azuma, et al. (1995). "Preferential dependence of autoantibody production in murine lupus on CD86 costimulatory molecule." Eur J Immunol 25(11): 3060-9.