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# **Product Information**

Contents: Allophycocyanin (APC) anti-mouse CD86 (B7-2)

Catalog Number: 17-0862

Sizes: 50 ug, 100 ug

Formulation: Phosphate buffer pH 7.2,

150 mM NaCl, 0.09% NaN<sub>3</sub>

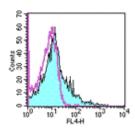
Storage Conditions: Store at 4°C.

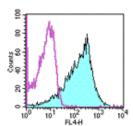
DO NOT FREEZE.

LIGHT-SENSITIVE MATERIAL.

Clone: GL1

Isotype: Rat IgG2a, κ





Staining of unstimulated (left) and 3 day LPS activated (right) C57Bl/6 splenocytes with 0.03 µg of APC rat IgG2a isotype control (cat.17-4321) (open histogram) or 0.03 µg of APC GL1 (colored histogram). Total viable cells were used for analysis.

Available	Formats of This Product			
Cat. No.	Format	Excite (nm)	Emit (nm)	Reported Applications
11-0862	FITC anti-mouse CD86 (B7-2)	488	518	FC
12-0862	PE anti-mouse CD86 (B7-2)	488	575	FC
13-0862	Biotin anti-mouse CD86 (B7-2)	N/A	N/A	FC
14-0862	Affinity Purified anti-mouse CD86 (B7-2)	N/A	N/A	FA FC IP
15-0862	PE-Cy5 anti-mouse CD86 (B7-2)	488	670	FC
16-0862	Functional Grade* Purified anti-mouse CD86 (B7-2)	N/A	N/A	FA FC
17-0862	APC anti-mouse CD86 (B7-2)	633	660	FC

<sup>\*</sup>Functional Grade $^{\text{\tiny TM}}$  (FG $^{\text{\tiny TM}}$ ): Azide-free, sterile-filtered, and endotoxin < 0.001 ng/ $\mu$ g.

Purified: Contains azide, not sterile-filtered, and not endotoxin tested.

# Description

The GL1 monoclonal antibody reacts with mouse CD86, an ~80 kDa surface receptor also known as B7-2. CD86 & 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). This interaction 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 GL1 antibody has been reported for use in flow cytometric analysis.

#### **Applications Tested**

The GL1 antibody has been tested by flow cytometric analysis of resting and activated mouse splenocyte suspensions. This can be used at less than or equal to 0.06  $\mu$ g per million cells in a 100  $\mu$ l total staining volume. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

#### Related Products

Cat. 14-0861	Affinity Purified anti-mouse CD86 (B7-2) (clone PO3.1)
Cat. 16-0861	Functional Grade 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. 17-4321	APC Rat IgG2a Isotype Control

# References

Hathcock, K. S., G. Laszlo, et al. (1993). "Identification of an alternative CTLA-4 ligand costimulatory for T cell activation [see comments]." Science 262(5135): 905-7.

Freeman, G. J., F. Borriello, et al. (1993). "Murine B7-2, an alternative CTLA4 counter-receptor that costimulates T cell proliferation and interleukin 2 production." J Exp Med 178(6): 2185-92.

Inaba, K., M. Witmer-Pack, et al. (1994). "The tissue distribution of the B7-2 costimulator in mice: abundant expression on dendritic cells in situ and during maturation in vitro." J Exp Med 180(5): 1849-60.

Hathcock, K. S., G. Laszlo, et al. (1994). "Comparative analysis of B7-1 and B7-2 costimulatory ligands: expression and function." J Exp Med 180(2): 631-40

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