

Anti-Mouse CD86 (B7-2) eFluor® 605NC

Catalog Number: 93-0862 Also Known As:B72, B7.2, B70, Ly-58

RUO: For Research Use Only. Not for use in diagnostic procedures.



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.

Applications Reported

This GL1 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This GL1 antibody has been pre-titrated and tested by flow cytometric analysis of LPS stimulated mouse splenocytes. This can be used at 5 μ L per test. A test is defined as the amount of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test.

The Rat IgG2a lisotype Control eFluor 605NC (cat. 93-4321) should be used at 5 uL/test.

Laser/Filter Recommendation: When using eFluor 605NC, we recommend excitation with the 405nm violet laser with an appropriate filter set, such as the 595LP dichroic mirror with the 605/40 bandpass filter. An acceptable alternative is the 610/20 bandpass filter. For instruments not equipped with a violet laser, the eFluor 605NC is also excited by the 488 nm blue laser and can be used as a PE-Texas Red alternative.

Fixation Recommendation: When fixing samples that have been stained with nanocrystal reagents, we recommend keeping the total volume at approximately 200 µL of IC Fixation Buffer (cat. 00-8222) and the exposure time 30-60 minutes to preserve the optimal fluorescent signal from the nanocrystal reagent.

For answers about fixation and other questions, please refer to Nanocrystal Frequently Asked Questions or contact eBioscience Technical Support.

References

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

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. (1993). Identification of an alternative CTLA-4 ligand costimulatory for T cell activation. 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.

Related Products

00-4222 Flow Cytometry Staining Buffer 93-4321 Rat IgG2a K Isotype Control eFluor® 605NC (eBR2a)

Legal

Under patent number: US 7,939,170 and additional pending patent application(s)

Not for further distribution without written consent. Copyright © 2000-2012 eBioscience, Inc. Tel: 888.999.1371 or 858.642.2058 • Fax: 858.642.2046 • www.eBioscience.com • info@eBioscience.com