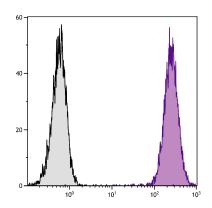
SouthernBiotech



Rat Anti-Mouse CD86

Cat. No.	Format	Size
1735-01	Purified (UNLB)	0.5 mg
1735-02	Fluorescein (FITC)	0.5 mg
1735-08	Biotin (BIOT)	0.5 mg
1735-09	R-phycoerythrin (PE)	0.1 mg
1735-09L	R-phycoerythrin (PE)	0.2 mg
1735-11	Allophycocyanin (APC)	0.1 mg
1735-13	Spectral Red® (SPRD)	0.1 mg
1735-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1735-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	0.1 mg
1735-27	Alexa Fluor® 700 (AF700)	0.1 mg
1735-30	Alexa Fluor® 488 (AF488)	0.1 mg
1735-31	Alexa Fluor® 647 (AF647)	0.1 mg



DBA/2 mouse mastocytoma cell line P815 and m87.2-lg transfected P815 cells were stained with Rat Anti-Mouse CD86-AF700 (SB Cat. No. 1735-27)

Overview

Clone GL1

Isotype Rat (LOU) IgG_{2a}κ

Immunogen LPS-activated CBA/Ca mouse spleen B cells

Specificity Mouse CD86; Mr 80 kDa

Alternate Name(s) B7-2, B70, Ly-58

Description

CD86, also known as B7-2, is a type I transmembrane glycoprotein and a member of the immunoglobulin superfamily of cell surface receptors. It is expressed at high levels on resting peripheral monocytes and dendritic cells and at very low density on resting B and T lymphocytes. CD86 expression is rapidly upregulated by B-cell specific stimuli with peak expression at 18-42 hours after stimulation. CD86, along with CD80 (B7-1), is an important accessory molecule in T cell costimulation via its interaction with CD28 and CD152 (CTLA-4). Since CD86 has rapid kinetics of induction, it is believed to be the major CD28 ligand expressed early in the immune response. The monoclonal antibody GL1 blocks mixed lymphocyte reactions and stimulation of T cells by antigen-presenting cells.

Applications

FC – Quality tested ^{1,3-13} IHC-FS – Reported in literature ⁴ IP – Reported in literature ¹ Block – Reported in literature ^{1,3,4}

Working Dilutions

Flow Cytometry FITC, BIOT, and AF488 conjugates ≤ 1 μg/10⁶ cells

PE, APC, SPRD, PE/CY7, AF647, and AF700 conjugates \leq 0.1 μ g/10⁶ cells For flow cytometry, the suggested use of these reagents is in a final volume of 100 μ L

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is

appropriate for your specific need.

For Research Use Only. Not for Diagnostic or Therapeutic Use.

Email: info@southernbiotech.com • Website: www.southernbiotech.com

Handling and Storage

- The purified (UNLB) antibody is supplied as 0.5 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No
 preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The fluorescein (FITC) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The biotin (BIOT) conjugate is supplied as 0.5 mg in 1.0 mL of PBS/NaN₃. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 0.1 mg in 1.0 mL or 0.2 mg in 2.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The allophycocyanin (APC) conjugate is supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The Spectral Red[®] (SPRD) and R-phycoerythrin-Cyanine 7 (PE/CY7) conjugates are supplied as 0.1 mg in 1.0 mL of PBS/NaN₃ and a stabilizing agent. Store at 2-8°C. **Do not freeze!**
- The low endotoxin, azide-free (LE/AF) antibody is supplied as 0.5 mg purified immunoglobulin in 1.0 mL of PBS. Contains no
 preservative; handle under aseptic conditions. Store at 2-8°C or aliquot into smaller volumes and store at -20°C. Avoid multiple
 freeze / thaw cycles.
- The Alexa Fluor® 488 (AF488), Alexa Fluor® 647 (AF647), and Alexa Fluor® 700 (AF700) conjugates are supplied as 0.1 mg in 0.2 mL of PBS/NaN₃. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

References

- 1. Hathcock KS, Laszlo G, Dickler HB, Bradshaw J, Linsley P, Hodes RJ. Identification of an alternative CTLA-4 ligand costimulatory for T cell activation. Science. 1993;262:905-7. (Immunogen, IP, FC, Block)
- Laszlo G, Hathcock KS, Dickler HB, Hodes RJ. Characterization of a novel cell-surface molecule expressed on subpopulations of activated T and B cells. J Immunol. 1993;150:5252-62. (Immunogen)
- Hathcock KS, Laszlo G, Pucillo C, Linsley P, Hodes RJ. Comparative analysis of B7-1 and B7-2 costimulatory ligands: expression and function. J Exp Med. 1994;180:631-40. (FC, Block)
- 4. Inaba K, Witmer-Pack M, Inaba M, Hathcock KS, Sakuta H, Azuma M, et al. 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. 1994;180:1849-60. (FC, Block, IHC-FS)
- Cheng X, Wang C, Qian G, Zhu B. CD80, but not CD86 were up-regulated on the spleen-derived dendritic cells from OVA-sensitized and challenged BALB/c mice. Immunol Lett. 2003;89:31-38. (FC)
- 6. Choi K, Kim J, Lee Y, Kim J, Suh B, Kim H, et al. Concurrent delivery of GM-CSF and B7-1 using an oncolytic adenovirus elicits potent antitumor effect. Gene Ther. 2006;13:1010-20. (FC)
- 7. Lee Y, Kim J, Choi K, Choi I, Kim H, Cho S, et al. Enhanced antitumor effect of oncolytic adenovirus expressing interleukin-12 and B7-1 in an immunocompetent murine model. Clin Cancer Res. 2006;12:5859-68. (FC)
- 8. Zaru R, Mollahan P, Watts C. 3-phosphoinositide-dependent kinase 1 deficiency perturbs toll-like receptor signaling events and actin cytoskeleton dynamics in dendritic cells. J Biol Chem. 2008;283:929-39. (FC)
- 9. Fink LN, Frøkiær H. Dendritic cells from Peyer's patches and mesenteric lymph nodes differ from spleen dendritic cells in their response to commensal gut bacteria. Scand J Immunol. 2008;68:270-9. (FC)
- 10. Wang Y, Bai C, Wang G, Wang D, Cheng X, Huang J, et al. Protection against the allergic airway inflammation depends on the modulation of spleen dendritic cell function and induction of regulatory T cells in mice. Genet Vaccines Ther. 2010;8:2. (FC)
- 11. Jacobsen JT, Lunde E, Sundvold-Gjerstad V, Munthe LA, Bogen B. The cellular mechanism by which complementary Id* and anti-Id antibodies communicate: T cells integrated into idiotypic regulation. Immunol Cell Biol. 2010;88:515-22. (FC)
- 12. Wismar R, Brix S, Lærke HN, Frøkiær H. Comparative analysis of a large panel of non-starch polysaccharides reveals structures with selective regulatory properties in dendritic cells. Mol Nutr Food Res. 2011;55:443-54. (FC)
- 13. Li J, Liu Y, Gao X, Gao X, Cai H. TLR2 and TLR4 signaling pathways are required for recombinant Brucella abortus BCSP31-induced cytokine production, functional upregulation of mouse macrophages, and the Th1 immune response in vivo and in vitro. Cell Mol Immunol. 2014;11:477-94. (FC)

Spectral Red® is a registered trademark of Southern Biotechnology Associates, Inc.

Spectral Red® is a PE/CY5 tandem conjugate.

Cy™ is a trademark of Cytiva or one of its subsidiaries.

Alexa Fluor® 488, 647, 700 and Pacific Blue™ are provided under an agreement between Molecular Probes, Inc. (a wholly owned subsidiary of Invitrogen Corporation), and Southern Biotechnology Associates, Inc., and the manufacture, use, sale or import of this product may be subject to one or more U.S. patents, pending applications, and corresponding non-U.S. equivalents, owned by Molecular Probes, Inc. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The buyer cannot sell or otherwise transfer (a) this product (b) its components or (c) materials made using this product or its components to a third party or otherwise use this product or its components or materials made using this product or its components for Commercial Purposes. Commercial Purposes means any activity by a party for consideration and may include, but is not limited to: (1) use of the product or its components in manufacturing; (2) use of the product or its components for therapeutic, diagnostic or prophylactic purposes; or (4) resale of the product or its components, whether or not such product or its components are resold for use in research. For information on purchasing a license to this product for any other use, contact Molecular Probes, Inc., Business Development, 29851 Willow Creek Road, Eugene, OR 97402, USA, Tel: (541) 465-8300. Fax: (541) 335-0504.

TB1735 08-Oct-21

Email: info@southernbiotech.com • Website: www.southernbiotech.com