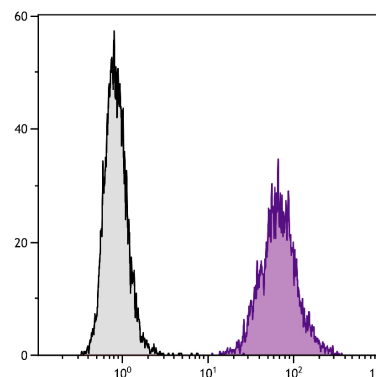




Rat Anti-Mouse CD86

Cat. No.	Format	Size
1915-01	Purified (UNLB)	0.5 mg
1915-02	Fluorescein (FITC)	0.5 mg
1915-08	Biotin (BIOT)	0.5 mg
1915-09	R-phycoerythrin (PE)	0.1 mg
1915-11	Allophycocyanin (APC)	0.1 mg
1915-13	Spectral Red® (SPRD)	0.1 mg
1915-14	Low Endotoxin, Azide-Free (LE/AF)	0.5 mg
1915-17	R-phycoerythrin-Cyanine 7 (PE/CY7)	0.1 mg



DBA/2 mouse mastocytoma cell line P815 and mB7.2-Ig transfected P815 cells were stained with Rat Anti-Mouse CD86-FITC (SB Cat. No. 1915-02).

Overview

Clone	2D10
Isotype	Rat (Lewis) IgG _{2b} K
Immunogen	Mouse B cell lymphoma cell line 5C2
Specificity	Mouse CD86; Mr 80 kDa
Alternate Name(s)	B7-2, B70, Ly-58

Description

CD86 (B7-2) is an 80 kDa type I integral membrane protein and a member of the immunoglobulin superfamily of cell surface receptors. Along with CD80 (B7-1), CD86 participates in T cell costimulation via interaction with CD28 and CD152 (CTLA-4). It is expressed at very low density in normal tissues but is rapidly upregulated on stimulated B cells, monocytes, and dendritic cells. Since CD86 has rapid kinetics of induction, it is believed to be the major CD28 ligand expressed early in the immune response.

Applications

FC – Quality tested ^{1,2,4,6,7}
 IHC-FS – Reported in literature ⁴
 IP – Reported in literature ¹
 Block – Reported in literature ^{1-3,5}
 Sep – Reported in literature ²
 CMCD – Reported in literature ²
 ELISA – Reported in literature ³

Working Dilutions

Flow Cytometry	FITC and BIOT conjugates	≤ 1 µg/10 ⁶ cells
	PE, APC, SPRD, and PE/CY7 conjugates	≤ 0.2 µg/10 ⁶ cells
	For flow cytometry, the suggested use of these reagents is in a final volume of 100 µL	
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.

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 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.
- 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. Chen C, Faherty DA, Gault A, Connaughton SE, Powers GD, Godfrey DI, et al. Monoclonal antibody 2D10 recognizes a novel T cell costimulatory molecule on activated murine B lymphocytes. J Immunol. 1994;152:2105-14. (Immunogen, FC, IP, Block)
2. Roth R, Nakamura T, Mamula MJ. B7 costimulation and autoantigen specificity enable B cells to activate autoreactive T cells. J Immunol. 1996;157:2924-31. (FC, Sep, CMCD, Block)
3. Bagenstose LM, Class R, Salgame P, Monestier M. B7-1 and B7-2 co-stimulatory molecules are required for mercury-induced autoimmunity. Clin Exp Immunol. 2002;127:12-19. (Block, ELISA)
4. Issazadeh S, Navikas V, Schaub M, Sayegh M, Khoury S. Kinetics of expression of costimulatory molecules and their ligands in murine relapsing experimental autoimmune encephalomyelitis in vivo. J Immunol. 1998;161:1104-12. (FC, IHC-FS)
5. Shanafelt M, Kang I, Barthold SW, Bockenstedt LK. Modulation of murine Lyme borreliosis by interruption of the B7/CD28 T-cell costimulatory pathway. Infect Immun. 1998;66:266-71. (Block)
6. Grodeland G, Mjaaland S, Roux KH, Fredriksen AB, Bogen B. DNA vaccine that targets hemagglutinin to MHC class II molecules rapidly induces antibody-mediated protection against influenza. J Immunol. 2013;191:3221-31. (FC)
7. Matsuo H, Yoshimoto N, Iijima M, Niimi T, Jung J, Jeong S, et al. Engineered hepatitis B virus surface antigen L protein particles for in vivo active targeting of splenic dendritic cells. Int J Nanomedicine. 2012;7:3341-50. (FC)

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Spectral Red® is a PE/CY5 tandem conjugate.

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