

TECHNICAL DATA SHEET

PE Anti-Human CD86 (B7-2) (IT2.2)

Catalog Number: 50-0869

PRODUCT INFORMATION

Contents: PE Anti-Human CD86 (B7-2) (IT2.2)

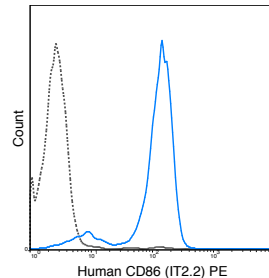
Isotype: Mouse IgG2b, kappa

Concentration: 5 uL (0.5 ug)/test

Clone: IT2.2

Reactivity: Human

Formulation: 10 mM NaH₂PO₄, 150 mM NaCl, 0.09% NaN₃,
0.1% gelatin, pH7.2



Human peripheral blood monocytes were stained with 5 uL (0.5 ug) PE Anti-Human CD86 (50-0869) (solid line) or 0.5 ug PE Mouse IgG2b isotype control (dashed line).

DESCRIPTION

The IT2.2 antibody reacts with human CD86, also known as B7-2, an 80 kDa cell surface protein which is a ligand for CD28, a co-stimulatory receptor for the T cell receptor (TCR). CD28 can also bind a second B7 ligand known as CD80 (B7-1). Both CD80 and CD86 are expressed on activated B cells and antigen-presenting cells. These ligands trigger CD28 signaling in concert with TCR activation to drive T cell proliferation, induce high-level expression of IL-2, impart resistance to apoptosis, and enhance T cell cytotoxicity. The interaction / co-stimulatory signaling between the B7 ligands and CD28 provides crucial communication between T cells and B cells or APCs to coordinate the adaptive immune response. The IT2.2 antibody may be used as a marker for CD86 expression on B cells, macrophages, and dendritic cells. It is reported to be cross-reactive with Rhesus, Cynomolgus and Common marmoset CD86.

PREPARATION & STORAGE

This monoclonal antibody was purified from tissue culture supernatant via affinity chromatography. The purified antibody was conjugated under optimal conditions, with unreacted dye removed from the preparation. It is recommended to store the product undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.

APPLICATION NOTES

This antibody preparation has been pre-titrated and quality-tested for flow cytometry using an appropriate cell type. The antibody has been diluted for use at 5 uL per test, defined as the amount of antibody that will stain a cell sample in a final volume of approximately 100 uL. The number of cells within a sample should be determined empirically, but typically ranges between 1x10⁵ to 1x10⁸ cells.

REFERENCES

Morgado P, Ong Y-C, Boothroyd JC, and Lodoen MB. 2011. *Infect. Immun.* 79: 4401-4412. (in vitro stimulation) Kap YS, van Meurs M, van Driel N, Koopman G, Melief M-J, Brok HPM, Laman JD, and 't Hart BA. 2009. *J. Histochemistry & Cytochemistry.* 57: 1159-1167. (immunohistochemistry – frozen tissue: Rhesus, Cynomolgus, Common marmoset) Teleshova N, Kenney J, Williams V, Van Nest G, Marshall J, Lifson LM, Sivin I, Dufour J, Bohm R, Gettie A, and Pope M. 2006. *J. Leukoc. Biol.* 79:257-267. (flow cytometry – Rhesus macaque) Conti L, Casetti R, Cardone M, Varano B, Martino A, Belardelli F, Poccia F, and Gessani S. 2005. *J. Immunol.* 174: 252-260. (flow cytometry, in vitro blocking) Esser MT, Graham DR, Coren LV, Trubey CM, Bess JW, Arthur LO, Ott DE, and Lifson JD. 2001. *J. Virol.* 75(13):6173-6182. (western blot)

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.

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