

## TECHNICAL DATA SHEET

# PE Anti-Mouse CD86 (B7-2) (GL-1)

Catalog Number: 50-0862

## PRODUCT INFORMATION

**Contents:** PE Anti-Mouse CD86 (B7-2) (GL-1)

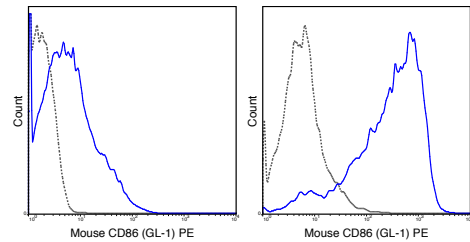
**Isotype:** Rat IgG2a, kappa

**Concentration:** 0.2 mg/mL

**Clone:** GL-1 (GL1)

**Reactivity:** Mouse

**Formulation:** 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, 0.09% Na<sub>3</sub>N, 0.1% gelatin, pH7.2



C57B/6 splenocytes were unstimulated (left panel) or stimulated for 3 days with LPS (right panel) and stained with 0.125 ug PE Anti-Mouse CD86 (50-0862) (solid line) or 0.125 ug PE Rat IgG2a isotype control (dashed line).

## DESCRIPTION

The GL-1 antibody reacts with mouse 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 GL-1 antibody may be used as a marker for CD86 expression on B cells, macrophages, and dendritic cells.

## 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 quality-tested for flow cytometry using mouse spleen cells, or an appropriate cell type (where indicated). The amount of antibody required for optimal staining of a cell sample should be determined empirically in your system.

## REFERENCES

Liu Z, Geboes K, Hellings P, Maerten P, Heremans H, Vandenberghe P, Boon L, van Kooten P, Rutgeerts P, and Ceuppens JL. 2011. *J. Immunol.* 167: 1830-1838. (in vivo blocking, immunohistochemistry – OCT embedded frozen tissue) Kastenmuller W, Gasteiger G, Subramanian N, Sparwasser T, Busch DH, Belkaid Y, Drexler I, and Germain RN. 2011. *J. Immunol.* 187: 3186-3197. (in vivo blocking) Zheng SG, Wang JH, Stohl W, Kim KS, Gray JD, and Horwitz DA. 2006. *J. Immunol.* 176:3321-3329. (in vitro blocking) Leithauser F, Meinhardt-Krajina T, Fink K, Wotschke B, Moller P and Reimann J. 2006. *Am. J. Pathol.* 168(6): 1898-1909. (immunohistochemistry – frozen tissue) Odobasic D, Kitching AR, Semple TJ, Timoshanko JR, Tipping PG, and Holdsworth SR. 2005. *J. Am. Soc. Nephrol.* 16: 2012-2022. (in vivo activation, immunofluorescence microscopy – frozen tissue, immunohistochemistry – frozen tissue) Lenschow DJ, Ho SC, Sattar H, Rhee L, Gray G, Nabavi N, Herold KC, and Bluestone JA. 1995. *J. Exp. Med.* 181:1145-1155. (in vitro blocking) Blazar BR, Taylor PA, Panoskalis-Mortari A, Gray GS, and Valleria DA. 1995. *Blood.* 85: 2607-2618. (immunohistochemistry – OCT embedded frozen tissue)