

## TECHNICAL DATA SHEET

# PE Anti-Mouse CD86 (B7-2) (PO3.1)

Catalog Number: 50-0861

## PRODUCT INFORMATION

**Contents:** PE Anti-Mouse CD86 (B7-2) (PO3.1)

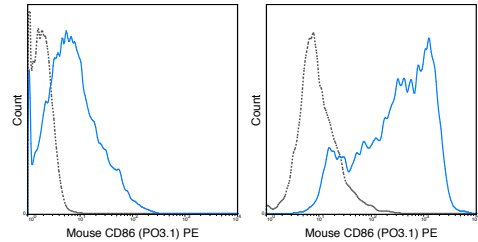
**Isotype:** Rat IgG2b, kappa

**Concentration:** 0.2 mg/mL

**Clone:** PO3.1

**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



C57Bl/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 (50-0861) (solid line) or 0.125 ug PE Rat IgG2b isotype control (dashed line).

## DESCRIPTION

The PO3.1 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 PO3.1 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

Ioannou M, Alissafī T, Lazaridis I, Deraos G, Matsoukas J, Gravanis A, Mastorodemos V, Plaitakis A, Sharpe A, Boumpas D, and Verginis P. 2012. *J. Immunol.* 188: 1136-1146. (flow cytometry) Zhang J, Kawashima N, Suda H, Nakano Y, Takano Y, and Azuma M. 2006. *Int. Immunol.* 18: 1375-1384. (immunohistochemistry – frozen tissue) Kin NW and Sanders VM. 2006. *J. Immunol.* 176: 6727 – 6735. (in vitro activation) Spadaro M, Ambrosino E, Iezzi M, Di Carlo E, Sacchetti P, Curcio C, Amici A, Wei W-Z, Musiani P, Lollini P-L, Cavallo F, Forni G. 2005. *Clin. Cancer Res.* 11: 1941-1952. (immunohistochemistry – frozen tissue) Pokojil JR, Kin NW, and Sanders VM. 2004. 279: 23394-23404. (in vitro activation) Iwai H, Kozono Y, Hirose S, Akiba H, Yagita H, Okumura K, Kohsaka H, Miyasaka N, and Azuma M. 2002. *J. Immunol.* 169: 4332-4339. (in vitro activation)

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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