TECHNICAL DATA SHEET

PE Anti-Mouse CD80 (B7-1) (16-10A1)

Catalog Number: 50-0801

PRODUCT INFORMATION

Contents: PE Anti-Mouse CD80 (B7-1) (16-10A1)

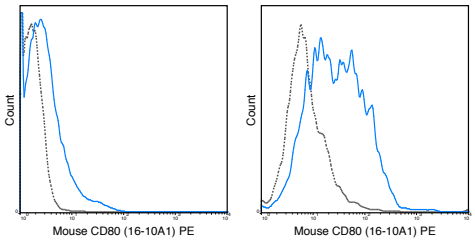
Isotype: Armenian Hamster IgG

Concentration: 0.2 mg/mL

Clone: 16-10A1

Reactivity: Mouse

Formulation: 10 mM NaH_2PO_4, 150 mM NaCl, 0.09% NaN_3, 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 CD80 (50-0801) (solid line) or 0.125 ug PE Armenian Hamster isotype control (dashed line).

DESCRIPTION

The 16-10A1 antibody reacts with mouse CD80, also known as B7-1, a 55 kDa type I transmembrane protein ligand for CD152 (CTLA-4) and for CD28, a co-stimulatory receptor for the T cell receptor (TCR). CD28 also binds a second B7 ligand known as CD86 (B7-2). 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 or CTLA-4 provides crucial communication between T cells and B cells or APCs to coordinate the adaptive immune response.

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

Thaventhiran JED, Hoffmann A, Magiera L, de la Roche M, Lingel H, Brunner-Weinzierl M, and Fearon DT. 2012. Proc. Natl. Acad. Sci. 10.1073. (in vitro blocking, flow cytometry)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)Anraku M, Tagawa T, Wu Licun, Yun Z, Keshavjee S, Zhang L, Johnston MR, and de Perrot M. 2010. J. Immunol. 185:956-966. (flow cytometry) 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 and immunohistochemistry – frozen tissue)Lenschow DJ, Ho SC, Sattar H, Rhee L, Gray G, Nabavi N, Herold KC, and Bluestone JA. 1995. J. Exp. Med. 181:1145-155. (in vitro blocking)Razi-Wold Z, Freeman GJ, Galvin F, Benacerraf B, Nadler L, and Reiser H. 1992. Proc. Natl. Acad. Sci. 89:4210-4214. (Origination of clone, immunoprecipitation, in vitro blocking)

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