

TECHNICAL DATA SHEET

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

Catalog Number: 20-0801

PRODUCT INFORMATION

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

Isotype: Armenian Hamster IgG

Concentration: 0.2 mg/mL

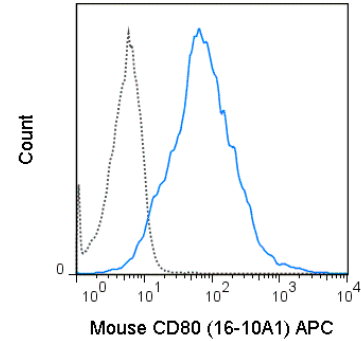
Clone: 16-10A1

Reactivity: Mouse

Use By: 12 months from date of receipt

Storage Conditions: 2-8°C protected from light

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



C57Bl/6 splenocytes were stimulated with anti-IgM and anti-CD40 for 4 days. Cells were then stained with 0.06 ug APC Anti-Mouse CD80 (20-0801) (solid line) or 0.06 ug APC 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 costimulatory 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). Please refer to the figure legend for the optimal concentration used to stain the tissue shown. We recommend titrating the antibody under your specific conditions to determine the optimal concentration of antibody needed in your experimental system.

REFERENCES

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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)

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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)

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)

Tonbo Biosciences tests all antibodies by flow cytometry. Citations are provided as a resource for additional applications that have not been validated by Tonbo Biosciences. Please choose the appropriate format for each application and consult Materials and Methods sections for additional details about the use of any product in these publications.

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