

**PE/Dazzle™ 594 anti-mouse CD80**

**Catalog # / Size:** 1123690 / 100 µg  
1123685 / 25 µg

**Clone:** 16-10A1

**Isotype:** Hamster IgG

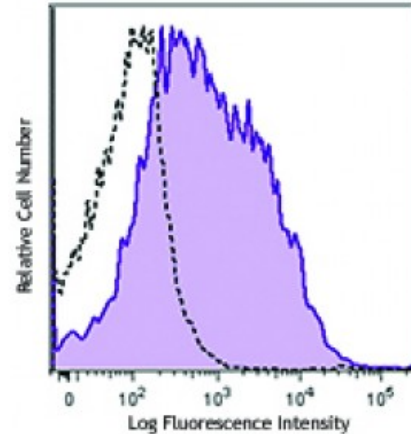
**Immunogen:** CHO cell line transfected with mouse B7 (CD80)

**Reactivity:** Other

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.2



LPS-stimulated (day 3) C57BL/6 mouse splenocytes stained with CD80 (clone 16-10A1) PE/Dazzle™ 594 (filled histogram) or Armenian hamster IgG PE/Dazzle™ 594 isotype control (open histogram).

**Applications:**

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: immunoprecipitation<sup>2</sup>, *in vitro* and *in vivo* blocking of CTLA-4 Ig to CD80 by blocking costimulation of T cells by activated B cells<sup>2-4</sup>, and immunohistochemical staining of acetone-fixed frozen sections<sup>1,4</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 104710).

- Application References:**
1. Harlan DM, *et al.* 1994. *P. Natl. Acad. Sci. USA* 91:3137. (IHC)
  2. Razi-Wolf Z, *et al.* 1992. *P. Natl. Acad. Sci. USA* 89:4210. (Block, IP)
  3. Hathcock KS, *et al.* 1994. *J. Exp. Med.* 180:631. (Block)
  4. Herold KC, *et al.* 1997. *J. Immunol.* 158:984. (Block, IHC)
  5. Ma XT, *et al.* 2006. *Cancer Res.* 66:1169.
  6. Andoniou CE, *et al.* 2005. *Nature Immunology* 6:1011. (FC)
  7. Lawson BR, *et al.* 2007. *J. Immunol.* 178:5366.
  8. Turnquist HR, *et al.* 2007. *J. Immunol.* 178:7018.
  9. Misra RS, *et al.* 2010. *J. Exp. Med.* 207:1775. [PubMed](#)
  10. del Rio ML, *et al.* 2011. *Transpl. Int.* 24:501. (FC) [PubMed](#)
  11. Murakami R, *et al.* 2013. *PLoS One.* 8:73270. [PubMed](#)

**Description:** CD80 is a 60 kD highly glycosylated protein. It is a member of the Ig superfamily

and is also known as B7-1, B7, and Ly-53. CD80 is constitutively expressed on dendritic cells and monocytes/macrophages, and inducibly expressed on activated B and T cells. The ligation of CD28 on T cells with CD80 and CD86 (B7-2) on antigen presenting cells (such as dendritic cells, macrophages, and B cells) elicits co-stimulation of T cells resulting in enhanced cell activation, proliferation, and cytokine production. CD80 appears to be expressed later in the immune response than CD86. CD80 can also bind to CD152, also known as CTLA-4, to deliver an inhibitory signal to T cells.

**Antigen  
References:**

1. Barclay AN, *et al.* 1997. *The Leukocyte Antigen FactsBook* Academic Press.
2. Linsley PS, *et al.* 1991. *J. Exp. Med.* 174:561.
3. Salomon B, *et al.* 2001. *Annu. Rev. Immunol.* 19:225.