SONY

Product Data Sheet

Pacific Blue™ anti-mouse CD80

Catalog # / Size: 1123620 / 100 µg
1123615 / 25 µg

Clone: 16-10A1

Isotype: Hamster IgG

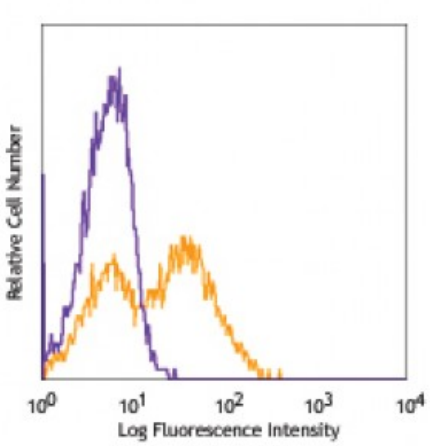
Immunogen: CHO cell line transfected with mouse B7 (CD80)

Reactivity: Other

Preparation: The antibody was purified by affinity chromatography, and conjugated with Pacific Blue™ under optimal conditions. The solution is free of unconjugated Pacific Blue™.

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

Concentration: 0.5



Anti-mouse IgM and CD40 (1C10) stimulated (4 days) C57BL/6 splenocytes stained with 16-10A1 Pacific Blue™

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 10^6 cells in 100 microL volume or 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes: Additional reported applications (for the relevant formats) include: immunoprecipitation2, *in vitro* and *in vivo* blocking of CTLA-4 Ig to CD80 by blocking costimulation of T cells by activated B cells[2-4], and immunohistochemical staining of acetone-fixed frozen sections[1,4]. 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. Stack G, *et al.* 2015. *PLoS Pathog.* 11:1004641. 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

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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.

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