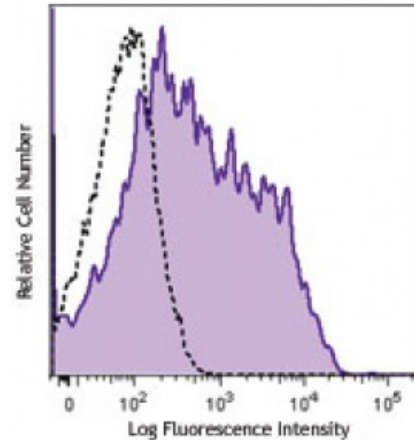


Brilliant Violet 605™ anti-mouse CD80

Catalog # / Size: 1123645 / 125 µl
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 Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and unconjugated antibody.
Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Concentration: Lot-specific



LPS-stimulated (day 3) C57BL/6 mouse splenocytes were stained with CD80 (clone 16-10A1) Brilliant Violet 605™.

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 ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. **Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel.** Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.

This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

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 cells²⁻⁴, 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](#)
-

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.