SONY

Product Data Sheet

Brilliant Violet 650™ anti-mouse CD86

Catalog # / Size: 1125175 / 125 µl
1125180 / 50 µg

Clone: GL-1

Isotype: Rat IgG2a, κ

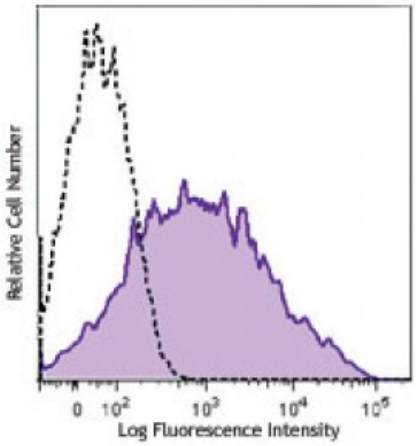
Immunogen: LPS-activated CBA/Ca mouse splenic B cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 650™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 650™ and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: Lot-specific



LPS-stimulated (3 days) C57BL/6 mouse splenocytes were stained with GL-1 Brilliant Violet 650™.

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 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 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 650™ is a trademark of Sirigen Group Ltd.

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Application Notes: The GL-1 antibody can block the mixed lymphocyte reaction *in vitro* and has been shown to inhibit the priming of cytotoxic T lymphocytes *in vivo* (along with antibodies against B7-1). Additional reported applications (for the relevant formats) include: immunoprecipitation1, immunohistochemical staining of acetone-fixed frozen sections[2,6], immunofluorescence microscopy, and *in vivo* and *in vitro* blocking of T cell responses[1-6]. GL-1 is not suitable for immunohistochemical staining of formalin-fixed paraffin sections. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 105010).

Application References:
1. Hathcock KS, *et al.* 1993. *Science* 262:905. (Block, IP)
2. Inaba KM, *et al.* 1994. *J. Exp. Med.* 180:1849. (Block, IHC)
3. Hathcock KS, *et al.* 1994. *J. Exp. Med.* 180:631. (Block)
4. Krummel MF, *et al.* 1995. *J. Exp. Med.* 182:459. (Block)
5. Liu Y, *et al.* 1997. *J. Exp. Med.* 185:251. (Block)
6. Herold KC, *et al.* 1997. *J. Immunol.* 158:984. (Block, IHC)
7. Shih FF, *et al.* 2006. *J. Immunol.* 176:3438. (FC)
8. Lawson BR, *et al.* 2007. *J. Immunol.* 178:5366.
9. Turnquist HR, *et al.* 2007. *J. Immunol.* 178:7018.
10. Klinger MB, *et al.* 2007. *Am. J. Physiol. Requl. Integr. Comp. Physiol.* 293:R677. PubMed

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Description: CD86 is an 80 kD immunoglobulin superfamily member also known as B7-2, B70, and Ly-58. CD86 is expressed on activated B and T cells, macrophages, dendritic cells, and astrocytes. CD86, along with CD80, is a ligand of CD28 and CD152 (CTLA-4). CD86 is expressed earlier in the immune response than CD80. CD86 has also been shown to be involved in immunoglobulin class-switching and triggering of NK cell-mediated cytotoxicity. CD86 binds to CD28 to transduce co-stimulatory signals for T cell activation, proliferation, and cytokine production. CD86 can also bind to CD152, also known as CTLA-4, to deliver an inhibitory signal to T cells.

Antigen References:
1. Barclay A, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Hathcock KS, *et al.* 1993. *Science* 262:905.
3. Freeman GJ, *et al.* 1993. *Science* 262:907.
4. Carreno BM, *et a*