Product Data Sheet

FITC anti-mouse CD86

| Catalog # / Size: | 1125025 / 50 μg 1125030 / 500 μg |
|-----------------------|--|
| Clone: | GL-1 |
| Isotype: | Rat IgG2a, к |
| Immunogen: | LPS-activated CBA/Ca mouse splenic B cells |
| Reactivity: | Mouse |
| Preparation: | The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC. |
| Formulation: | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. |
| Concentration: | 0.5 |



LPS-stimulated (3 days) C57BL/6 mouse splenocytes stained with GL-1 FITC

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 ≤ 1.0 microg per 10^6 cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application. |
| Application Notes: | The GL-1 antibody can block the mixed lymphocyte reaction <i>in vitro</i> and has been shown to inhibit the priming of cytotoxic T lymphocytes <i>in vivo</i> (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 <i>in vivo</i> and <i>in vitro</i> 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: | Hathcock KS, <i>et al.</i> 1993. <i>Science</i> 262:905. (Block, IP) Inaba KM, <i>et al.</i> 1994. <i>J. Exp. Med.</i> 180:1849. (Block, IHC) Hathcock KS, <i>et al.</i> 1994. <i>J. Exp. Med.</i> 180:631. (Block) Krummel MF, <i>et al.</i> 1995. <i>J. Exp. Med.</i> 182:459. (Block) Liu Y, <i>et al.</i> 1997. <i>J. Exp. Med.</i> 185:251. (Block) Herold KC, <i>et al.</i> 1997. <i>J. Immunol.</i> 158:984. (Block, IHC) Shih FF, <i>et al.</i> 2006. <i>J. Immunol.</i> 176:3438. (FC) Lawson BR, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:5366. Turnquist HR, <i>et al.</i> 2007. <i>J. Immunol.</i> 178:7018. Klinger MB, <i>et al.</i> 2007. <i>Am. J. Physiol. Requl. Integr. Comp. Physiol.</i> 293:R677. PubMed Tsang JY, <i>et al.</i> 2011. <i>Int Immunol.</i> 192:1277. PubMed Liang Y, <i>et al.</i> 2014. <i>J. Immunol.</i> 192:1277. PubMed DeFalco T, <i>et al.</i> 2014. <i>PNAS.</i> 111:2384. PubMed |

Description: CD86 is an 80 kD immunoglobulin superfamily member also known as B7-2, B70,

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products. Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com 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 1. Barclay A, et al. 1997. The Leukocyte Antigen FactsBook Academic Press.

References: 2. Hathcock KS, et al. 1993. Science 262:905.

3. Freeman GJ, et al. 1993. Science 262:907.

4. Carreno BM, et a