SONY

# Product Data Sheet

## Alexa Fluor® 700 anti-mouse CD86

**Catalog # / Size:** 1125115 / 25 µg
1125120 / 100 µg

**Clone:** GL-1

**Isotype:** Rat IgG2a, κ

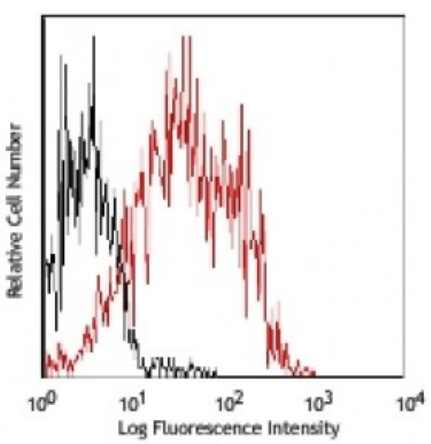
**Immunogen:** LPS-activated CBA/Ca mouse splenic B cells

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 700 under optimal conditions.

**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 Alexa Fluor® 700

## Applications:

**Applications:** Flow Cytometry

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. The suggested use of this reagent is ≤1.0 microg per million cells in 100 microL volume. It is highly recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 700 has a maximum emission of 719 nm when it is excited at 633 nm / 635 nm. Prior to using Alexa Fluor® 700 conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

**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*