SONY

Product Data Sheet

Alexa Fluor® 700 anti-mouse CD172a (SIRPα)

Catalog # / Size: 1320105 / 25 µg
1320110 / 100 µg

Clone: P84

Isotype: Rat IgG1, κ

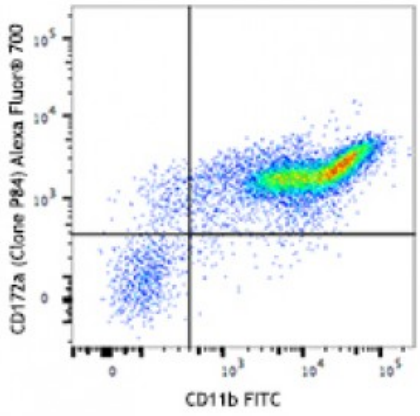
Immunogen: Mouse brain membrane protein

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: 0.2



C57BL/6 mouse bone marrow cells were stained with CD11b FITC and CD172a (clone P84) Alexa Fluor™ 700 (top) or rat IgG1, κ Alexa Fluor™ 700 isotype control (bottom). Data shown was gated on myeloid cell population.

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 ≤0.50 microg per million cells in 100 microL volume. It is 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: Additional reported applications (for the relevant formats) include: blocking SIRPα interaction with CD474, *in vivo* blocking of dendritic cell migration3, enhancing of macrophage phagocytosis[2,4], immunohistochemical staining of cerebellum frozen sections1, and immunoprecipitation[2,4].

Application References:

1. Comu S, *et al.* 1997. *J. Neurosci.* 17:8702. (IHC)
2. Gresham HD, *et al.* 2000. *J. Exp. Med.* 191:515. (IP)
3. Fukunaga A, *et al.* 2004. *J. Immunol.* 172:4091. (Block)
4. Oldenborg PA, *et al.* 2000. *Science* 288:2051. (Block, IP)

Description: CD172a, also known as SIRPα, is a type I transmembrane protein with one V-set Ig-like and two C-set Ig-like domains in the extracellular portion, and two ITIM motifs and a proline-rich region in the cytoplasmic tail. CD172a is expressed by monocytes, macrophages, myeloid cells, and neuronal tissue. The phosphorylation of SIRPα ITIMs induces the recruitment and activation of the tyrosine phosphatases PTPN6 and PTPN11, resulting in the negative regulation of several biological processes. The ligands of CD172a are CD47, SP-A, and SP-D.

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

Antigen References:
1. Zhao XW, *et al.* 2011. *P. Natl. Acad. Sci. USA* 108:18342.
2. Verjan-Garcia N, *et al.* 2011. *J. Immunol.* 187:2268.
3. Sato-Hashimoto M, *et al.* 2011. *J. Immunol.* 187:291.
4. Raymond M,