FITC anti-mouse CD172a (SIRPα)

Catalog # / Size: $1320030 / 100 \mu g$

1320025 / 25 μg

Clone: P84

Isotype: Rat IgG1, κ

Immunogen: Mouse brain membrane protein

Reactivity: Mouse

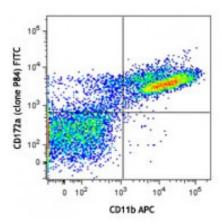
Preparation: The antibody was purified by affinity

chromatography, and conjugated with 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



C57BL/6 mouse bone marrow cells were stained with CD11b APC and CD172a (clone P84) FITC (top) or rat IgG1, κ FITC isotype control (bottom). Data shown was gated on the 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 ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

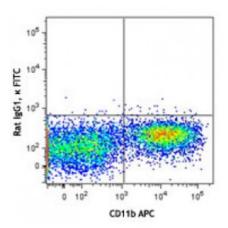
Application Notes:

Additional reported applications (for the relevant formats) include: blocking SIRP α 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 SIRP α , 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.

Antigen References:

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