

APC/Cy7 anti-mouse CD172a (SIRP α)

Catalog # / Size: 1320085 / 25 μ g
 1320090 / 100 μ g

Clone: P84

Isotype: Rat IgG1, κ

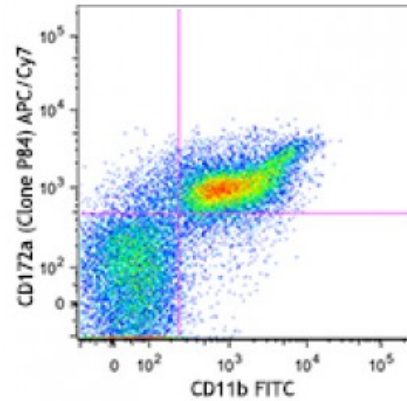
Immunogen: Mouse brain membrane protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7 and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: Lot-specific



C57BL/6 mouse bone marrow cells were stained with CD11b FITC and CD172a (clone P84) APC/Cy7 (top) or rat IgG1, κ APC/Cy7 isotype control (bottom). Data shown was gated on myeloid cell population.

Applications:

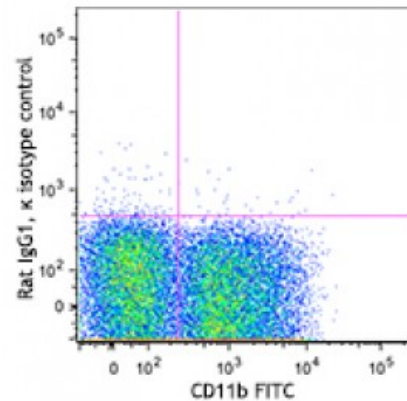
Applications: Flow Cytometry

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 ≤ 0.25 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 SIRP α 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.
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,