

**APC/Fire™ 750 anti-mouse CD172a (SIRPα)**

**Catalog # / Size:** 1320145 / 25 µg  
1320150 / 100 µg

**Clone:** P84

**Isotype:** Rat IgG1, κ

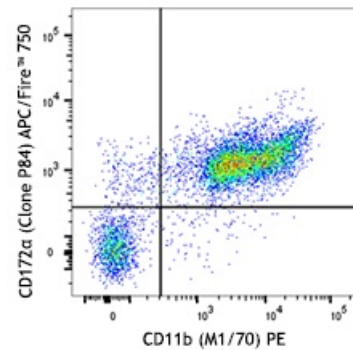
**Immunogen:** Mouse brain membrane protein

**Reactivity:** Mouse

**Preparation:** The antibody was purified by affinity chromatography and conjugated with APC/Fire™ 750 under optimal conditions.

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

**Concentration:** 0.2 mg/ml



C57BL/6 mouse bone marrow cells were stained with CD11b PE and CD172a (clone P84) APC/Fire™ 750 (top) or rat IgG1, κ APC/Fire™ 750 isotype control (bottom). Data shown was gated on myeloid cell population.

**Applications:**

**Applications:** Flow Cytometry

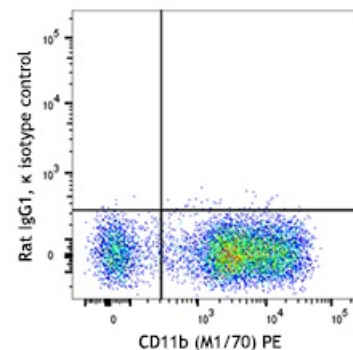
**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal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

\* APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.

**Application Notes:** Additional reported applications (for the relevant formats) include: blocking SIRPα interaction with CD47<sup>4</sup>, *in vivo* blocking of dendritic cell migration<sup>3</sup>, enhancing of macrophage phagocytosis<sup>2,4</sup>, immunohistochemical staining of cerebellum frozen sections<sup>1</sup>, and immunoprecipitation<sup>2,4</sup>.

**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 $\alpha$ , 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 $\alpha$  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, *et al.* 2010. *Eur. J. Immunol.* 40:3510.