SONY

Product Data Sheet

PerCP/Cyanine5.5 anti-mouse CD172a (SIRPα)

Catalog # / Size: 1320050 / 100 µg
1320045 / 25 µg

Clone: P84

Isotype: Rat IgG1, κ

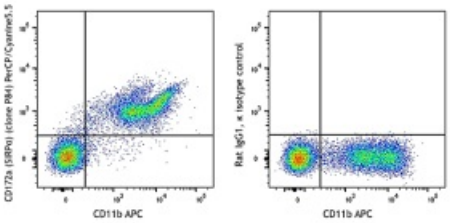
Immunogen: Mouse brain membrane protein

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions.

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

Concentration: 0.2



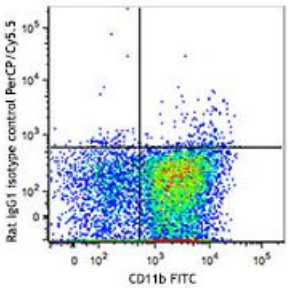
C57BL/6 mouse bone marrow cells were stained with CD11b APC and CD172a (SIRPα) (clone P84) PerCP/Cyanine5.5 (left) or Rat IgG1, κ PerCP/Cyanine5.5 isotype control (right). Data shown was gated on myeloid cell population.

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 ≤1.5 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.



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)

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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.

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.

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