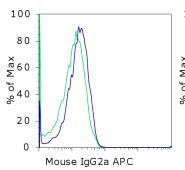


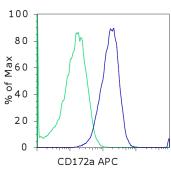
An Affymetrix Company

# Anti-Human CD172a (SIRP alpha) APC

Catalog Number: 17-1729 Also known as: SIRPa, SHPS-1

RUO: For Research Use Only. Not for use in diagnostic procedures.





Staining of normal human peripheral blood cells with Mouse IgG2a K Isotype Control APC (cat. 17-4724) (left) or Anti-Human CD172a (SIRP alpha) APC (right). Cells in the lymphocyte (green histogram) or granulocyte (blue histogram) gate were used for analysis.

#### **Product Information**

Contents: Anti-Human CD172a (SIRP alpha)

APC.

REF Catalog Number: 17-1729

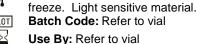
Clone: 15-414

Concentration: 5 uL (0.5 ug)/test Host/Isotype: Mouse IgG2a



Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer

Temperature Limitation: Store at 2-8°C. Do not





### Description

This 15-414 monoclonal antibody reacts with human CD172a, also known as signal regulatory protein alpha (SIRP alpha). This cell surface glycoprotein consists of three Iq-like extracellular domains and two cytoplasmic immunoreceptor tyrosine-based inhibitory motifs (ITIMs). The ITIM domains have been demonstrated to recruit and bind the Src homology 2 domain-containing phosphatases SHP-1 and SHP-2. CD172a is expressed on monocytes, granulocytes, dendritic cells, and CD34+CD38- hematopoietic progenitor cells but not on T and B lymphocytes. Moreover, neurons have also been shown to express CD172. The integrin-associated protein CD47 is the extracellular ligand for CD172a. Studies show that CD172a is involved in dendritic cell-mediated T cell activation, neutrophil migration, and phagocytosis.

#### **Applications Reported**

This 15-414 antibody has been reported for use in flow cytometric analysis.

#### **Applications Tested**

This 15-414 antibody has been pre-titrated and tested by flow cytometric analysis of human peripheral blood cells. This can be used at 5 µL (0.5 µg) per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10<sup>5</sup> to 10<sup>8</sup> cells/test.

## References

Barclay AN. Signal regulatory protein alpha (SIRPalpha)/CD47 interaction and function. Curr Opin Immunol. 2009 Feb;21(1):1-2. Review.

Liu Y, Bühring HJ, Zen K, Burst SL, Schnell FJ, Williams IR, Parkos CA. Signal regulatory protein (SIRPalpha), a cellular ligand for CD47, regulates neutrophil transmigration. J Biol Chem. 2002 Mar 22;277(12):10028-36.

Seiffert M, Brossart P, Cant C, Cella M, Colonna M, Brugger W, Kanz L, Ullrich A, Bühring HJ. Signal-regulatory protein alpha (SIRPalpha) but not SIRPbeta is involved in T-cell activation, binds to CD47 with high affinity, and is



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expressed on immature CD34(+)CD38(-) hematopoietic cells. Blood. 2001 May 1;97(9):2741-9.

#### **Related Products**

12-0389 Anti-Human CD38 PE (HIT2)
17-4724 Mouse IgG2a K Isotype Control APC
51-0349 Anti-Human CD34 Alexa Fluor® 647 (To Be Discontinued. Refer to Alternative Format: APC cat. 17-0349)
(4H11)