

CD172a (SIRP alpha) Monoclonal Antibody (15-414), Super Bright™ 436, eBioscience™

Product Details	
Size	100 Tests
Species Reactivity	Human
Host/Isotype	Mouse / IgG2a, kappa
Recommended Isotype Control	Mouse IgG2a kappa Isotype Control (eBM2a), Super Bright™ 436, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	15-414
Conjugate	Super Bright™ 436
Excitation/Emission Max	413/431 nm
Form	Liquid
Concentration	5 µL/Test
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with BSA
Contains	0.09% sodium azide
Storage conditions	4°C, store in dark, DO NOT FREEZE!
RRID	AB_2744794

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	5 µL (0.5 µg)/test	1 Publication

Product Specific Information

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 Ig-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 normal 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 10⁵ to 10⁸ cells /test.

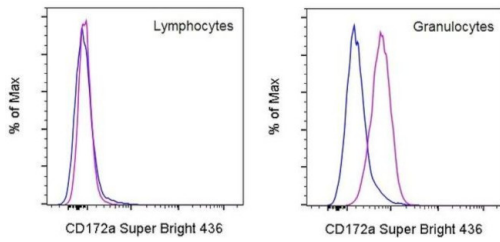
Super Bright 436 can be excited with the violet laser line (405 nm) and emits at 436 nm. We recommend using a 450/50 bandpass filter, or equivalent. Please make sure that your instrument is capable of detecting this fluorochrome.

When using two or more Super Bright dye-conjugated antibodies in a staining panel, it is recommended to use Super Bright Complete Staining Buffer (Product # SB-4401) to minimize any non-specific polymer interactions. Please refer to the datasheet for Super Bright Staining Buffer for more information.

Excitation: 405 nm; Emission: 436 nm; Laser: Violet Laser

Super Bright Polymer Dyes are sold under license from Becton, Dickinson and Company.

Product Images For CD172a (SIRP alpha) Monoclonal Antibody (15-414), Super Bright™ 436, eBioscience™



CD172a (SIRP alpha) Antibody (62-1729-42) in Flow

Normal human peripheral blood cells were stained with Mouse IgG2a Isotype Control, Super Bright 436 (Product # 62-4724-82) (blue histogram) or CD172a Monoclonal Antibody, Super Bright 436 (purple histogram). Cells in lymphocyte (left) and granulocyte (right) gates were used for analysis.

1 Reference

Flow Cytometry (1)

EBioMedicine

SIRP maintains macrophage homeostasis by interacting with PTK2B kinase in Mycobacterium tuberculosis infection and through autophagy and necroptosis.

"Published figure using CD172a (SIRP alpha) monoclonal antibody (Product # 62-1729-42) in Flow Cytometry"

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Year
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