Datasheet for ABIN7013994

anti-SIRPA antibody (PE)

2 Images

Go to Product page

Overview

Quantity:	100 tests
Target:	SIRPA
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SIRPA antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	Kg-1a cell line
Clone:	15-414
Isotype:	IgG2a
Specificity:	The mouse monoclonal antibody 15-414 recognizes en extracellular epitope of CD172a (SIRP alpha), an approximately 90 kDa transmembrane glycoprotein expressed on cells of myeloid origin and neurons.
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	SIRPA
Alternative Name:	CD172a (SIRPA Products)

Target Details

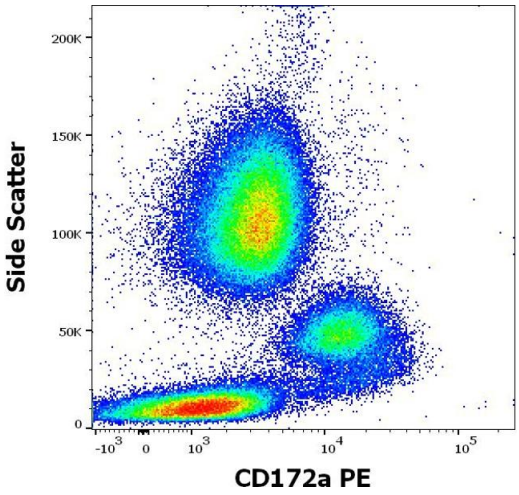
Background:	Signal regulatory protein alpha,CD172a, the signal-regulatory protein alpha (SIRP alpha), also known as SH2 domain-containing phosphatase substrate-1 (SHPS1), is a 75-110 kDa transmembrane glycoprotein expressed mainly on granulocytes, monocytes, macrophages, dendritic cells and neurons. Its extracellular ligand is CD47. CD172a serves as a substrate of activated receptor tyrosine kinases and upon phosphorylation it recruits SH2 domain-containing tyrosine phosphatases, thereby regulating signal transduction processes related to cell activation, transmigration and phagocytosis. CD172a is a specific marker of cardiomyocytes derived from human pluripotent stem cells and serves as a negative regulator of signaling and growth in myeloid progenitor cells.,PTPNS1, BIT, MFR, SIRPA, SHPS1
Gene ID:	140885
UniProt:	P78324

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µL reagent / 100 µL of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.
Restrictions:	For Research Use only

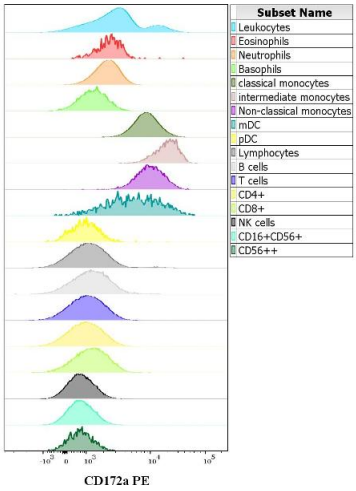
Handling

Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.



Flow Cytometry

Image 1. Anti-human CD172a PE antibody (clone 15-414) works in flow cytometry application. Analysis of the antibody staining profile was performed on blood leukocytes isolated from buffy coats. HCDM CDMaps standardized procedures (Kuzilkova D et al. Front Immunol. 2022,13:827898) were used for cell isolation and surface staining of blood leukocytes, with the modification of staining protocol using cytometry test tubes. Mouse monoclonal anti-human CD172a PE antibody (clone 15-414) was used in amount of 10 µL in 100 µL of blood sample (2 x 16 cells).



Flow Cytometry

Image 2. Expression profiling on peripheral blood subsets using Anti-human CD172a PE antibody (clone 15-414). HCDM CDMaps standardized procedures (Kuzilkova D et al. Front Immunol. 2022,13:827898) were used for cell isolation and surface staining of blood leukocytes, with the modification of staining protocol using cytometry test tubes. Suspension of blood leukocytes isolated from buffy coats (2 x 106 cells) was added to the mixture of anti-human SIGLEC10 PE antibody (clone 15-414, 10 µL reagent / 100 µL of stained blood sample) and Monocyte Blocking Buffer (#ED7747), vortexed and incubated for 20 min. Next, optimized backbone antibody panels (HLDA Innate and HLDA Adaptive) were added to test tubes, vortexed and incubated for 20 min. The residual erythrocytes were lysed with 2 mL of 10x diluted EXCELLYSE Easy solution (#ED7066) and incubated for 10 min. Finally, samples were centrifuged (670 g, 5 min.), supernatant removed and the cell pellet was resuspended in 200 µL of PBS for acquisition.