

30-2633: Anti-Human CD172ab PE (Clone : SE5A5)

Clonality :	Monoclonal
Clone Name :	SE5A5
Application :	FACS
Reactivity :	Human
Conjugate :	PE
Alternative Name :	PTPNS1, BIT, MFR, SIRPA, SHPS1, SIRPB1
Isotype :	Mouse IgG1
Immunogen Information :	NIH-3T3 / human CD172a cell line

Description

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. Extracellular part of CD172b is 90% identical to that of CD172a, but unlike CD172, it has dramatically reduced intracellular domain.

Specificity : The mouse monoclonal antibody SE5A5 recognizes a common extracellular epitope on human CD172a and CD172b antigens (approx. 90 kDa and approx. 50 kDa, respectively), although its reactivity with CD172a is higher.

Product Info

Amount :	100 tests
Purification :	The purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography.
Content :	Formulation : Stabilizing phosphate buffered saline (PBS) solution containing 15 mM sodium azide
Storage condition :	Store in the dark at 2-8°C. Do not freeze. Avoid prolonged exposure to light.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 10 μ l reagent / 100 μ l of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

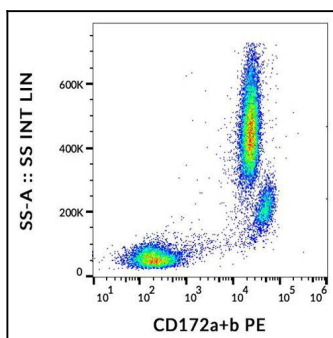


Figure 1 : Flow cytometry analysis (surface staining) of human peripheral blood cells with anti-human CD172a/b (SE5A5) PE.