

30-2850: Anti-Human CD172a FITC MAb (Clone: 15-414)

Clonality :	Monoclonal
Clone Name :	15-414
Application :	FACS
Reactivity :	Human
Conjugate :	FITC
Gene :	SIRPA
Gene ID :	140885
Uniprot ID :	P78324
Alternative Name :	PTPNS1, BIT, MFR, SIRPA, SHPS1
Isotype :	Mouse IgG2a
Immunogen Information :	Kg-1a cell line

Description

Specificity: The mouse monoclonal antibody 15-414 recognizes an extracellular epitope of CD172a (SIRP alpha), an approximately 90 kDa transmembrane glycoprotein expressed on cells of myeloid origin and neurons.

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.

Product Info

Amount :	100 tests
Purification :	Purified antibody is conjugated with fluorescein isothiocyanate (FITC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 4 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.

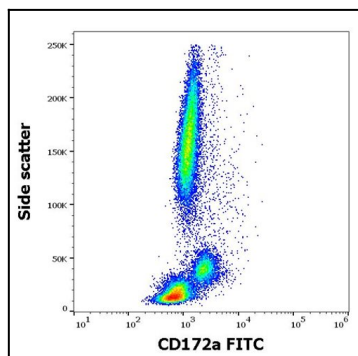


Figure 1 : Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD172a (15-414) FITC antibody (4 µl reagent / 100 µl of peripheral whole blood).

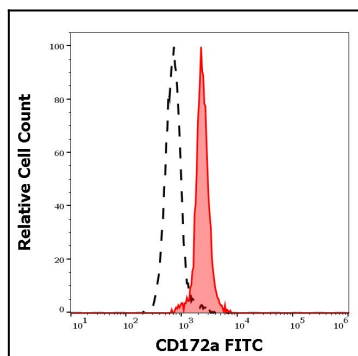


Figure 2: Separation of human monocytes (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD172a (15-414) FITC antibody (4 µl reagent / 100 µl of peripheral whole blood).