

### 30-2888: Anti-Hu CD172a APC Mab (Clone : 15-414)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	15-414
<b>Application :</b>	FACS
<b>Reactivity :</b>	Human
<b>Conjugate :</b>	APC
<b>Gene :</b>	SIRPA
<b>Gene ID :</b>	140885
<b>Uniprot ID :</b>	P78324
<b>Alternative Name :</b>	signal regulatory protein alpha, PTPNS1, BIT, MFR, SIRPA, SHPS1
<b>Isotype :</b>	Mouse IgG2a
<b>Immunogen Information :</b>	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

<b>Amount :</b>	100 tests (T100)
<b>Purification :</b>	Purified antibody is conjugated with activated allophycocyanin (APC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
<b>Content :</b>	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
<b>Storage condition :</b>	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 10 µl reagent / 100 µl of whole blood or 10<sup>6</sup> cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

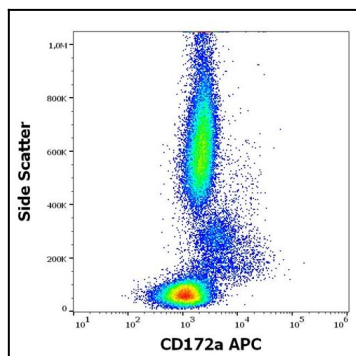


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD172a (15-414) APC antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

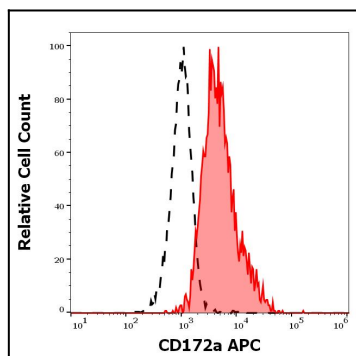


Figure 2: Separation of human monocytes (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD172a (15-414) APC antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).