

30-2890: Anti-Hu CD172ab APC Mab(SE5A5)

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

Description

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.

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.

Product Info

| | |
|----------------------------|---|
| Amount : | 100 Tests |
| Purification : | Purified antibody is conjugated with activated allophycocyanin (APC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography. |
| Content : | Formulation: 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 10 µl reagent / 100 µl of whole blood or 10⁶ cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests.

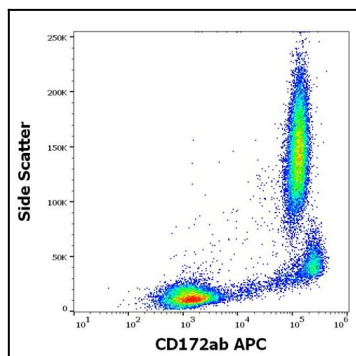


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD172ab (SE5A5) APC antibody (10 μ l reagent / 100 μ l of peripheral whole blood).

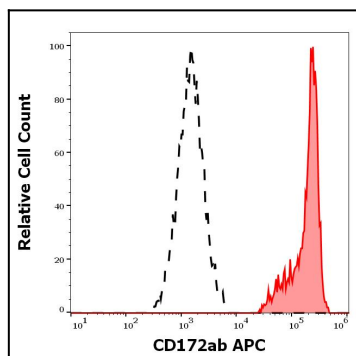


Figure 2: Separation of human monocytes (red-filled) from lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD172ab (SE5A5) APC antibody (10 μ l reagent / 100 μ l of peripheral whole blood).