

30-2849: Anti-Human CD100 FITC MAb (Clone: 133-1C6)

Clonality :	Monoclonal
Clone Name :	133-1C6
Application :	FACS
Reactivity :	Human
Conjugate :	FITC
Gene :	SEMA4D, semaphorin 4D
Gene ID :	10507
Uniprot ID :	Q92854
Alternative Name :	COLL4, SEMA4D, semaphorin 4D
Isotype :	Mouse IgM
Immunogen Information :	PHA stimulated human PBL

Description

Specificity: The mouse monoclonal antibody 133-1C6 recognizes an extracellular epitope of CD100, an approximately 150 kDa (when reduced) semaphorin family member expressed mainly on lymphocytes, NK cells, monocytes/macrophages and granulocytes, but also on some non-hematopoietic cells.

CD100, also known as semaphorin 4D, is a homodimerizing type I transmembrane glycoprotein containing an extracellular semaphorin domain. It is expressed on most hematopoietic cells with the exception of immature bone marrow cells, erythrocytes and platelets. A 120 kDa soluble form is generated from the transmembrane form by proteolytic cascade following primary T and B cell activation. It seems CD100 acts through dampening CD72-mediated negative signaling. CD100 promotes angiogenesis, invasive growth, proliferation and anti-apoptosis of cancer cells in vitro. Higher expression levels of CD100 correlate with poor survival in soft tissue sarcoma patients.

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 Tris buffered saline (TBS), pH 8.0, 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.

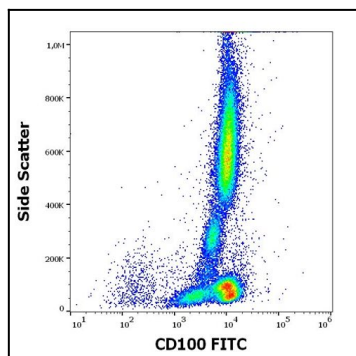


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD100 (133-1C6) FITC antibody (4 μ l reagent / 100 μ l of peripheral whole blood).

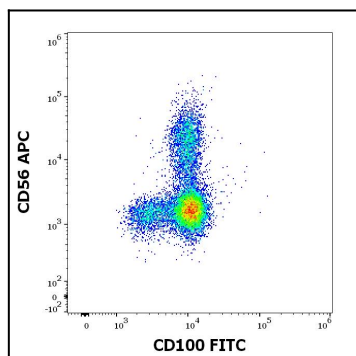


Figure 2: Flow cytometry multicolor surface staining of human lymphocytes stained using anti-human CD100 (133-1C6) FITC antibody (4 μ l reagent / 100 μ l of peripheral whole blood) and anti-human CD56 (LT56) APC antibody (10 μ l reagent / 100 μ l of peripheral whole blood).

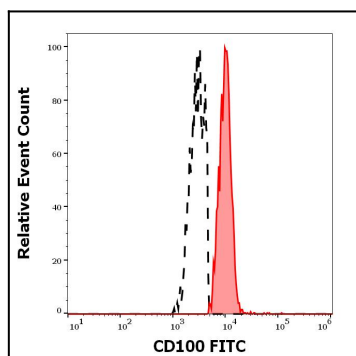


Figure 3: Separation of human CD100 positive CD56 positive lymphocytes (red-filled) from CD100 negative CD56 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD100 (133-1C6) FITC antibody (4 μ l reagent / 100 μ l of peripheral whole blood).