

9853 Pacific Heights Blvd. Suite D. San Diego, CA 92121, USA Tel: 858-263-4982

Email: info@abeomics.com

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

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  $\mu$ l reagent / 100  $\mu$ l of whole blood or 10 $^6$  cells in a suspension. The content of a vial (0.4 ml) is sufficient for 100 tests.



9853 Pacific Heights Blvd. Suite D. San Diego, CA 92121, USA Tel: 858-263-4982

Email: info@abeomics.com

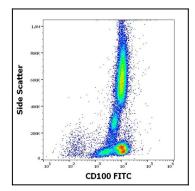


Figure 1: Flow cytometry surface staining pattern of human peripheral whole blood stained using anti-human CD100 (133-1C6) FITC antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

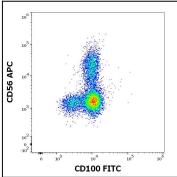


Figure 2: Flow cytometry multicolor surface staining of human lymphocytes stained using anti-human CD100 (133-1C6) FITC antibody (4  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood) and anti-human CD56 (LT56) APC antibody (10  $\mu$ l reagent / 100  $\mu$ l of peripheral whole blood).

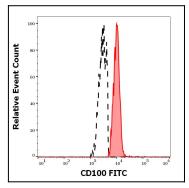


Figure 3: Separation of human CD100 positive CD56 positive lymphocytes (red-filled) from CD100 negative CD56 negative lymphocytes (black-dashed) in flow cytometry analysis (surface staining) of human peripheral whole blood stained using anti-human CD100 (133-1C6) FITC antibody (4  $\mu$ l reagent / 100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