# CD300LB (C-13): sc-161003



The Power to Question

#### **BACKGROUND**

CD300LB (CD300 molecule-like family member B), also known as CLM7, IREM3, TREM5 or CD300b, is a 201 amino acid single-pass type I membrane protein belonging to the CD300 family. Expressed exclusively in Myeloid lineages, CD300LB interacts with ITAM-bearing adapter DAP12 (DNAX-activating protein of 12 kDa), which enhances cell surface expression and activation properties. CD300LB is composed of a single extracellular Ig V-type domain followed by a transmembrane region containing a positively charged Lysine residue, a common feature among receptors that associate with activating adaptor proteins. CD300LB acts as a nonclassical activating receptor of the immunoglobulin (Ig) superfamily that is able to trigger signals by coupling distinct mediators and thus initiating different signaling pathways.

## **REFERENCES**

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## **CHROMOSOMAL LOCATION**

Genetic locus: CD300LB (human) mapping to 17q25.1.

# **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## **RESEARCH USE**

For research use only, not for use in diagnostic procedures.

### SOURCE

CD300LB (C-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of CD300LB of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161003 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **APPLICATIONS**

CD300LB (C-13) is recommended for detection of CD300LB of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with CD300LF or CD300LG.

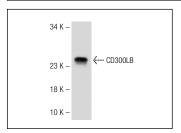
Suitable for use as control antibody for CD300LB siRNA (h): sc-94094, CD300LB shRNA Plasmid (h): sc-94094-SH and CD300LB shRNA (h) Lentiviral Particles: sc-94094-V.

Molecular Weight of CD300LB: 23 kDa.

## **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

#### **DATA**



CD300LB (C-13): sc-161003. Western blot analysis of CD300LB expression in LADMAC whole cell lysate.

#### **PROTOCOLS**

See our web site at www.scbt.com or our catalog for detailed protocols and support products.