CD300A, also known as CMRF35H, IRC1, IRC2, IRp60 or IGSF12, is a 299 amino acid single-pass type I membrane protein that localizes to the cell membrane and contains one Ig-like V-type domain. Expressed by mast cells, B cells, Dendritic cells, monocytes, granulocytes and natural killer (NK) cells, CD300A functions as an inhibitory receptor that is thought to help downregulate the cytolytic activity in NK cells and may also downregulate the degranulation of mast cells. CD300A exists as multiple alternatively spliced isoforms and is subject to post-translational phosphorylation and glycosylation. The gene encoding CD300A maps to human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

CHROMOSOMAL LOCATION
Genetic locus: Cd300a (mouse) mapping to 11 E2.

SOURCE
CD300A (S-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within a C-terminal cytoplasmic domain of CD300A of mouse origin.

PRODUCT
Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-161002 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS
CD300A (S-13) is recommended for detection of CD300A of mouse and rat origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 other CD300 family members.

Suitable for use as control antibody for CD300A siRNA (m): sc-142190, CD300A shRNA Plasmid (m): sc-142190-SH and CD300A shRNA (m) Lentiviral Particles: sc-142190-V.

Molecular Weight of CD300A: 33 kDa.

Molecular Weight of glycosylated CD300A: 60 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) 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.

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

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