



## CD1E (G-12): sc-103425

### BACKGROUND

The human CD1 family consists of five chromosome 1-localized genes which encode proteins that are involved in mediating the presentation of lipid antigens of microbial or self origin on the surface of immune cells. CD1E, also known as R2 or CD1A, is a 322 amino acid single-pass type I membrane protein that localizes to the lumen of the endoplasmic reticulum, as well as to the Golgi apparatus, and contains one Ig-like domain. Expressed in a variety of tissues and on cortical thymocytes, dendritic cells and Langerhans cells, CD1E exists as a heterodimer with  $\beta$ -2-Microglobulin and is necessary for the presentation of glycolipid antigens on the cell surface. CD1E is subject to post-translational mono-ubiquitination and may also be proteolytically cleaved in endosomes to yield a soluble protein. CD1E is present on the surface of some T cell leukemias, suggesting a possible role in tumorigenesis.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: CD1E (human) mapping to 1q23.1.

### STORAGE

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

### SOURCE

CD1E (G-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of CD1E 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-103425 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

CD1E (G-12) is recommended for detection of CD1E of human 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).

Suitable for use as control antibody for CD1E siRNA (h): sc-78837, CD1E shRNA Plasmid (h): sc-78837-SH and CD1E shRNA (h) Lentiviral Particles: sc-78837-V.

Molecular Weight of CD1E: 36 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](http://www.scbt.com) or our catalog for detailed protocols and support products.