

TREM-1 (L-20): sc-19310

BACKGROUND

TREM-1 (triggering receptor expressed on myeloid cells-1) is expressed in monocytes and neutrophils but not in lymphocytes, dendritic cells, or other cell types. TREM-1 is a glycoprotein that is reduced to deglycosylation, in agreement with the predicted molecular mass. TREM-1 is an activating receptor of the Ig superfamily expressed on human myeloid cells, selectively expressed on blood neutrophils and a subset of monocytes, and is up regulated by bacterial LPS. Immunoblot analysis shows that TREM-1 is associated with DAP12, a molecule frequently associated with activating receptors. TREM-1 and the myeloid DAP12-associating lectin (MDL-1) are two recently identified receptors which associate non-covalently with DAP12 to form receptor complexes involved in monocytic activation and inflammatory response. The gene which encodes TREM-1 maps to human chromosome 6.

REFERENCES

1. Bouchon, A., et al. 2000. Cutting edge: inflammatory responses can be triggered by TREM-1, a novel receptor expressed on neutrophils and monocytes. *J. Immunol.* 164: 4991-4995.
2. Bouchon, A., et al. 2001. TREM-1 amplifies inflammation and is a crucial mediator of septic shock. *Nature* 410: 1103-1107.
3. Gingras, M.C., et al. 2002. TREM-1, MDL-1, and DAP12 expression is associated with a mature stage of myeloid development. *Mol. Immunol.* 38: 817-824.
4. Chung, D.H., et al. 2002. Characterization of TREM-3, an activating receptor on mouse macrophages: definition of a family of single Ig domain receptors on mouse chromosome 17. *Eur. J. Immunol.* 32: 59-66.

CHROMOSOMAL LOCATION

Genetic locus: TREM1 (human) mapping to 6p21.1; Trem1 (mouse) mapping to 17 C.

SOURCE

TREM-1 (L-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of TREM-1 of human 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-19310 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

PROTOCOLS

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

APPLICATIONS

TREM-1 (L-20) is recommended for detection of TREM-1 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 TREM-1 siRNA (h): sc-42999, TREM-1 shRNA Plasmid (h): sc-42999-SH and TREM-1 shRNA (h) Lentiviral Particles: sc-42999-V.

Molecular Weight of TREM-1: 30/26 kDa.

Positive Controls: THP-1 cell lysate: sc-2238.

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.

SELECT PRODUCT CITATIONS

1. Lambert, C., et al. 2014. Gene expression pattern of cells from inflamed and normal areas of osteoarthritis synovial membrane. *Arthritis Rheumatol.* 66: 960-968.

RESEARCH USE

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



Try **TREM-1 (2E2): sc-293450**, our highly recommended monoclonal alternative to TREM-1 (L-20).