

TREM-1 (D-20): sc-19309

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 by 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 upregulated 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.

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.

SOURCE

TREM-1 (D-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region 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-19309 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.

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.

APPLICATIONS

TREM-1 (D-20) is recommended for detection of TREM-1 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).

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.

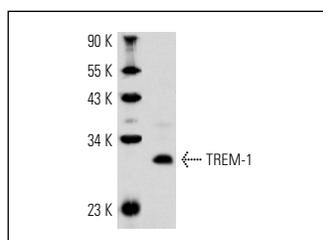
Molecular Weight of N-deglycosylated TREM-1: 30/26 kDa.

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) 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



TREM-1 (D-20): sc-19309. Western blot analysis of TREM-1 expression in THP-1 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Lim, R., et al. 2014. TREM-1 expression is increased in human placentas from severe early-onset preeclamptic pregnancies where it may be involved in syncytialization. *Reprod. Sci.* 21: 562-572.



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