

TREML2 (S-14): sc-109100

BACKGROUND

TREML2 (triggering receptor expressed on myeloid cells-like 2), also known as C6orf76 or TLT2, is a 321 amino acid single-pass type I membrane protein that contains one Ig-like V-type domain. Expressed in cultured B cells, as well as in T cell leukemia and monocyte leukemia, TREML2 functions as a cell surface receptor that is thought to play a role in the innate and adaptive immune responses. The gene encoding TREML2 maps to a region on human chromosome 6 that is shared by proteins which contain Ig variable (IgV) domains. Chromosome 6 contains 170 million base pairs and comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

REFERENCES

- Allcock, R.J., Barrow, A.D., Forbes, S., Beck, S. and Trowsdale, J. 2003. The human TREM gene cluster at 6p21.1 encodes both activating and inhibitory single IgV domain receptors and includes NKp44. *Eur. J. Immunol.* 33: 567-577.
- Online Mendelian Inheritance in Man, OMIM[™]. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609715. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- King, R.G., Herrin, B.R. and Justement, L.B. 2006. TREM-like transcript 2 is expressed on cells of the myeloid/granuloid and B lymphoid lineage and is upregulated in response to inflammation. *J. Immunol.* 176: 6012-6021.
- Wiersinga, W.J., Veer, C.T., Wieland, C.W., Gibot, S., Hooibrink, B., Day, N.P., Peacock, S.J. and van der Poll, T. 2007. Expression profile and function of triggering receptor expressed on myeloid cells-1 during melioidosis. *J. Infect. Dis.* 196: 1707-1716.

CHROMOSOMAL LOCATION

Genetic locus: Trem2 (mouse) mapping to 17 C.

SOURCE

TREML2 (S-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of TREML2 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-109100 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.

APPLICATIONS

TREML2 (S-14) is recommended for detection of TREML2 of mouse and rat 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 TREML2 siRNA (m): sc-154630, TREML2 shRNA Plasmid (m): sc-154630-SH and TREML2 shRNA (m) Lentiviral Particles: sc-154630-V.

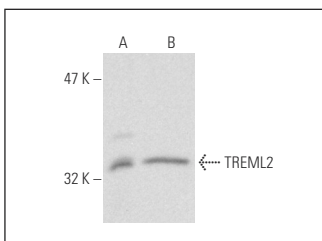
Molecular Weight of TREML2: 35 kDa.

Positive Controls: MM-142 cell lysate: sc-2246 or PMA + WEHI-231 whole cell lysate.

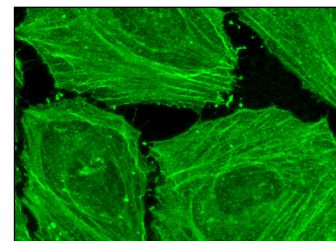
RECOMMENDED SECONDARY REAGENTS

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



TREML2 (S-14): sc-109100. Western blot analysis of TREML2 expression in MM-142 (A) and PMA treated WEHI-231 (B) whole cell lysates.



TREML2 (S-14): sc-109100. Immunofluorescence staining of methanol-fixed HeLa cells showing membrane and cytoplasmic localization.

RESEARCH USE

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



Try **TREML2 (G-12): sc-390343** or **TREML2 (A-5): sc-390167**, our highly recommended monoclonal alternatives to TREML2 (S-14).