

TREM1 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP18834b

Specification

TREM1 Antibody (C-term) - Product Information

WB,E Application **Primary Accession O9NP99** NP 061113.1 Other Accession Reactivity Human Host **Rabbit** Clonality **Polyclonal** Isotype Rabbit IgG Calculated MW 26387 Antigen Region 162-191

TREM1 Antibody (C-term) - Additional Information

Gene ID 54210

Other Names

Triggering receptor expressed on myeloid cells 1, TREM-1, Triggering receptor expressed on monocytes 1, CD354, TREM1

Target/Specificity

This TREM1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 162-191 amino acids from the C-terminal region of human TREM1.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

TREM1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

TREM1 Antibody (C-term) - Protein Information

Name TREM1

Function [Isoform 1]: Cell surface receptor that plays important roles in innate and adaptive



immunity by amplifying inflammatory responses (PubMed: 10799849, PubMed: 21393102). Upon activation by various ligands such as PGLYRP1, HMGB1 or HSP70, multimerizes and forms a complex with transmembrane adapter TYROBP/DAP12 (PubMed: 17568691, PubMed: 25595774, PubMed: 29568119). In turn, initiates a SYK-mediated cascade of tyrosine phosphorylation, activating multiple downstream mediators such as BTK, MAPK1, MAPK3 or phospholipase C-gamma (PubMed: 14656437, PubMed: 21659545). This cascade promotes the neutrophil- and macrophage- mediated release of pro-inflammatory cytokines and/or chemokines, as well as their migration and thereby amplifies inflammatory responses that are triggered by bacterial and fungal infections (PubMed: 17098818, PubMed: 17568691). By also promoting the amplification of inflammatory signals that are initially triggered by Toll-like receptor (TLR) and NOD-like receptor engagement, plays a major role in the pathophysiology of acute and chronic inflammatory diseases of different etiologies including septic shock and atherosclerosis (PubMed: 11323674, PubMed: 21393102).

Cellular Location

[Isoform 1]: Cell membrane; Single-pass type I membrane protein. Note=Recruited to lipid rafts when activated.

Tissue Location

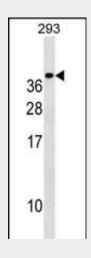
Mostly expressed by immune cells of the myeloid lineage, such as monocytes, macrophages, neutrophils and dendritic cells (PubMed:10799849). Expression is associated with a mature stage of myeloid development (PubMed:11922939). Highly expressed in adult liver, lung and spleen than in corresponding fetal tissue. Also expressed in the lymph node, placenta, spinal cord and heart tissues Isoform 2 was detected in the lung, liver and mature monocytes

TREM1 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TREM1 Antibody (C-term) - Images





TREM1 Antibody (C-term)(Cat. #AP18834b) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the TREM1 antibody detected the TREM1 protein (arrow).

TREM1 Antibody (C-term) - Background

Monocyte/macrophage- and neutrophil-mediated inflammatory responses can be stimulated through a variety of receptors, including G protein-linked 7-transmembrane receptors (e.g., FPR1; MIM 136537), Fc receptors (see MIM 146790), CD14 (MIM 158120) and Toll-like receptors (e.g., TLR4; MIM 603030), and cytokine receptors (e.g., IFNGR1; MIM 107470). Engagement of these receptors can also prime myeloid cells to respond to other stimuli. Myeloid cells express receptors belonging to the Ig superfamily, such as TREM1, or to the C-type lectin superfamily. Depending on their transmembrane and cytoplasmic sequence structure, these receptors have either activating (e.g., KIR2DS1; MIM 604952) or inhibitory functions (e.g., KIR2DL1; MIM 604936).

TREM1 Antibody (C-term) - References

Bailey, S.D., et al. Diabetes Care 33(10):2250-2253(2010) Davila, S., et al. Genes Immun. 11(3):232-238(2010) Tomita, H., et al. J. Rheumatol. 37(4):787-791(2010) Haselmayer, P., et al. J Innate Immun 1(6):582-591(2009) Kim, J., et al. Clin. Exp. Rheumatol. 27(5):773-778(2009)