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TREM1 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP18834b

Specification

TREM1 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q9NP99

TREM1 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 54210

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

TREM1 Antibody (C-term) Blocking Peptide - 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:25595774, PubMed:17568691, 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:21659545, PubMed:14656437). 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:17568691, PubMed:17098818). 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:21393102, PubMed:11323674).

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) Blocking Peptide - Protocols

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

- Blocking Peptides

TREM1 Antibody (C-term) Blocking Peptide - Images

TREM1 Antibody (C-term) Blocking Peptide - Background

Monocyte/macrophage- and neutrophil-mediated inflammatoryresponses 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) andToll-like receptors (e.g., TLR4; MIM 603030), and cytokinereceptors (e.g., IFNGR1; MIM 107470). Engagement of these receptorscan also prime myeloid cells to respond to other stimuli. Myeloidcells express receptors belonging to the Ig superfamily, such asTREM1, or to the C-type lectin superfamily. Depending on theirtransmembrane and cytoplasmic sequence structure, these receptorshave either activating (e.g., KIR2DS1; MIM 604952) or inhibitoryfunctions (e.g., KIR2DL1; MIM 604936).

TREM1 Antibody (C-term) Blocking Peptide - 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)