

Anti-TREM-1 Antibody

Catalog # ABO10900

Product Information

Application	WB, IHC-P, IHC-F
Primary Accession	Q9JKE2
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Triggering receptor expressed on myeloid cells 1(TREM1) detection. Tested with WB, IHC-P, IHC-F in Mouse.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	58217
Other Names	Triggering receptor expressed on myeloid cells 1, TREM-1, CD354, Trem1
Calculated MW	25409
Application Details	Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Mouse, - Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Mouse, By Heat Western blot, 0.1-0.5 µg/ml, Mouse
Subcellular Localization	Membrane ; Single-pass type I membrane protein .
Source	Eukaryota
Protein Name	Triggering receptor expressed on myeloid cells 1(TREM-1)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence in the middle of mouse TREM1(74-90aa FTRPSEVHMGKFTLKHD).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

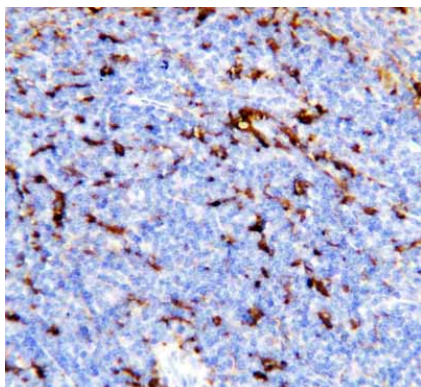
Protein Information

Name	Trem1
Function	Cell surface receptor that plays important roles in innate and adaptive immunity by amplifying inflammatory responses. Upon activation by various ligands such as PGLYRP1, HMGB1 or HSP70, multimerizes and forms a complex with transmembrane adapter TYROBP/DAP12. In turn, initiates a SYK-mediated cascade of tyrosine phosphorylation, activating multiple downstream mediators such as BTK, MAPK1, MAPK3 or phospholipase C-gamma. 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: 23241959 , PubMed: 27328755). 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 (By similarity).
Cellular Location	Cell membrane {ECO:0000250 UniProtKB:Q9NP99}; Single-pass type I membrane protein {ECO:0000250 UniProtKB:Q9NP99} Note=Recruited to lipid rafts when activated {ECO:0000250 UniProtKB:Q9NP99}

Background

Trem1, Triggering receptor expressed on myeloid cells-1, is encoded by Trem1 gene. The expression of Trem1 is in monocytes and neutrophils but not in lymphocytes, dendritic cells, or other cell types. Trem1 is a 30-kD glycoprotein that is reduced to 26 kD by deglycosylation, in agreement with the predicted molecular mass. The Trem1 gene which contains 4 exons maps to chromosome 6p21.1, within a TREM gene cluster and the mouse Trem1 gene maps to chromosome 17 in a region that shows homology of synteny to human chromosome 6. The expression of Trem1 is upregulated by stimulation with lipopolysaccharide(LPS), gram-negative bacteria, and fungi. Cross-linking of Trem1 on neutrophils induces interleukin-8(IL8) and myeloperoxidase secretion, while cross-linking on monocytes induces not only secretion of IL8 but also of monocyte chemotactic protein-1(MCP1, or SCYA2) and tumor necrosis factor(TNF); MCP1 and TNF secretion could be further upregulated by LPS-mediated priming. Trem1 engagement also induces upregulation of adhesion molecules(e.g., ITGB1) and costimulatory molecules(e.g., CD40). Trem1 is associated with DAP12(TYROBP), a molecule frequently associated with activating receptors.

Images



Anti-TREM1 antibody, ABO10900, IHC(P)IHC(P): Mouse Spleen Tissue

Anti-TREM1 antibody, ABO10900, Western blottingLane 1:

Recombinant Mouse TREM1 Protein 1ng



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