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Anti-TREM-1 Antibody
Catalog # ABO10900

Specification

Anti-TREM-1 Antibody - 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.

Anti-TREM-1 Antibody - Additional Information

Gene ID 58217

Other Names
Triggering receptor expressed on myeloid cells 1, TREM-1, CD354, Trem1

Calculated MW
25409 MW KDa

Application Details
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Mouse,
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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 .

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 r˚Constitution, 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.**

Anti-TREM-1 Antibody - 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}

Anti-TREM-1 Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-TREM-1 Antibody - Images

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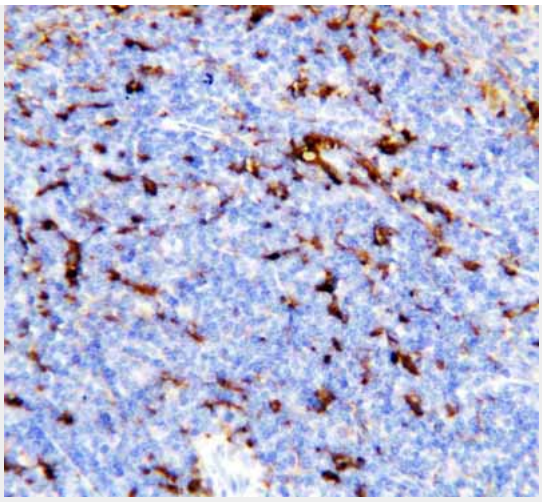
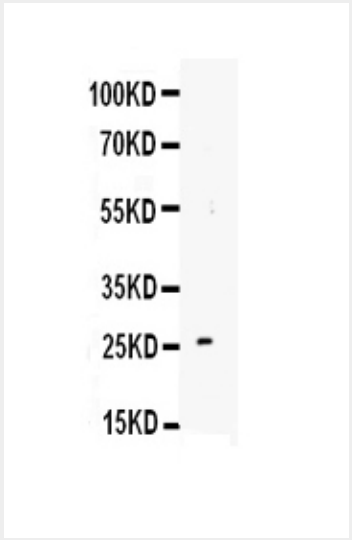


Anti-TREM1 antibody, ABO10900, IHC(P)IHC(P): Mouse Spleen Tissue



Anti-TREM1 antibody, ABO10900, Western blottingLane 1: Recombinant Mouse TREM1 Protein 1ng

Anti-TREM-1 Antibody - 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.