Datasheet for ABIN5519069

anti-TREM1 antibody (AA 21-202)

1 Image | 1 Publication

Go to Product page

Overview

Quantity:	100 µg
Target:	TREM1
Binding Specificity:	AA 21-202
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This TREM1 antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	Anti-TREM1 Antibody Picoband®
Immunogen:	E. coli-derived mouse TREM1 recombinant protein (Position: A21-S202).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-TREM1 Antibody Picoband® (ABIN5519069). Tested in ELISA, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Purification:	Immunogen affinity purified.

Target Details

Target:	TREM1
Alternative Name:	Trem1 (TREM1 Products)
Background:	Synonyms: Triggering receptor expressed on myeloid cells 1, TREM-1, CD354, Trem1, 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.
Molecular Weight:	26 kDa
Gene ID:	58217

Application Details

Application Notes:	Western blot, 0.1-0.5 µg/mL ELISA (Cap), 1-5 µg/mL 1. Allcock, R. J. N., Barrow, A. D., Forbes, S., Beck, S., Trowsdale, J.The human TREM gene cluster at 6p21.1 encodes both activating and inhibitory single IgV domain receptors and includes NKp44.Europ. J. Immun. 33: 567-577, 2003. 2. Bouchon, A., Dietrich, J., Colonna, M.Cutting edge: inflammatory responses can be triggered by TREM-1, a novel receptor expressed on neutrophils and monocytes.J. Immun. 164: 4991-4995, 2000.
Comment:	We recommend Enhanced Chemiluminescent Kit with anti-Rabbit IgG (ABIN921124) for Western blot.
Restrictions:	For Research Use only

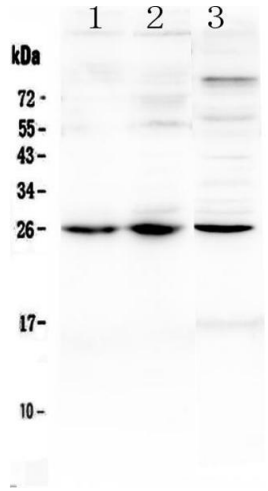
Handling

Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 5 mg BSA, 0.9 mg NaCl, 0.2 mg Na2HPO4, 0.05 mg Sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Publications

Product cited in:	Zhou, Xiong, Huang, Tang, Yu, Lan: "Identification of Genes Associated with Smad3-dependent Renal Injury by RNA-seq-based Transcriptome Analysis." in: **Scientific reports**, Vol. 5, pp. 17901, (2016) (PubMed).

Images



Western Blotting

Image 1. Western blot analysis of TREM1 using anti-TREM1 antibody . Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: mouse lung tissue lysates, Lane 2: mouse spleen tissue lysates, Lane 3: rat spleen tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TREM1 antigen affinity purified polyclonal

antibody (Catalog #) at 0.5 ug/mL overnight at 4â„ƒ, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TREM1 at approximately 26KD. The expected band size for TREM1 is at 26KD.