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Anti-TRAM1 Antibody
Catalog # ABO11317

Specification

Anti-TRAM1 Antibody - Product Information

Application	**WB, IHC, ICC**
Primary Accession	Q15629
Host	**Rabbit**
Reactivity	**Human, Mouse, Rat**
Clonality	**Polyclonal**
Format	**Lyophilized**

Description
Rabbit IgG polyclonal antibody for Translocating chain-associated membrane protein 1(TRAM1) detection. Tested with WB, IHC-P, IHC-F, ICC in Human;Mouse;Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-TRAM1 Antibody - Additional Information

Gene ID 23471

Other Names
Translocating chain-associated membrane protein 1, TRAM1, TRAM

Calculated MW
43072 MW KDa

Application Details
Immunocytochemistry , 0.5-1 µg/ml, Human, Mouse, Rat
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Rat, Human, Mouse
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization
Endoplasmic reticulum membrane; Multi-pass membrane protein.

Protein Name
Translocating chain-associated membrane protein 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 at the C-terminus of human TRAM1(314-331aa KFINFQLRRWREHSAFQA), identical to the related rat and mouse sequences.

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.

Sequence Similarities
Belongs to the TRAM family.

Anti-TRAM1 Antibody - Protein Information

Name TRAM1 (HGNC:20568)

Function
Involved in the translocation of nascent protein chains into or through the endoplasmic reticulum (ER) membrane by facilitating the proper chain positioning at the SEC61 channel (PubMed:12475939, PubMed:1315422, PubMed:32013668, PubMed:8616892, PubMed:9506517). Regulates the exposure of nascent secretory protein chain to the cytosol during translocation into the ER (PubMed:9506517). May affect the phospholipid bilayer in the vicinity of the lateral gate of the SEC61 channel, thereby facilitating ER protein transport (PubMed:32013668). Intimately associates with transmembrane (TM) domain of nascent membrane proteins during the entire integration process into the ER membrane (PubMed:8616892). Associates with the second TM domain of G-protein-coupled receptor opsin/OPSD nascent chain in the ER membrane, which may facilitate its integration into the membrane (PubMed:12475939). Under conditions of ER stress, participates in the disposal of misfolded ER membrane proteins during the unfolded protein response (UPR), an integrated stress response (ISR) pathway, by selectively retrotranslocating misfolded ER-membrane proteins from the ER into the cytosol where they are ubiquitinated and degraded by the proteasome (PubMed:20430023).

Cellular Location
Endoplasmic reticulum membrane; Multi-pass membrane protein

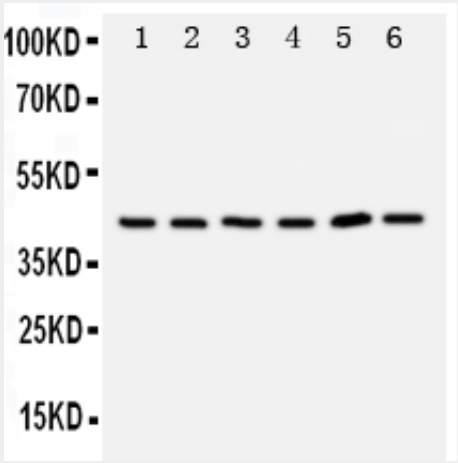
Anti-TRAM1 Antibody - Protocols

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

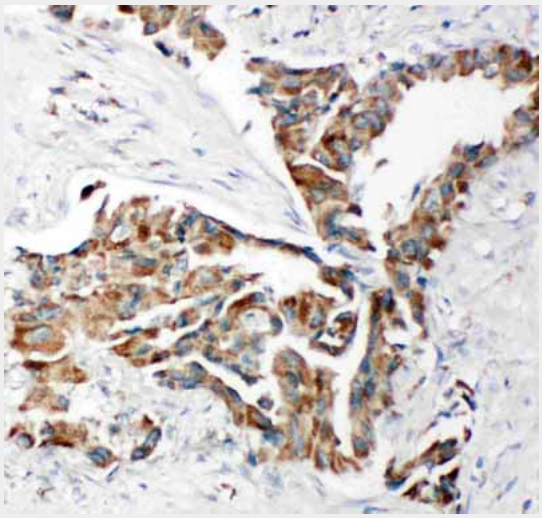
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety

- Cell Culture

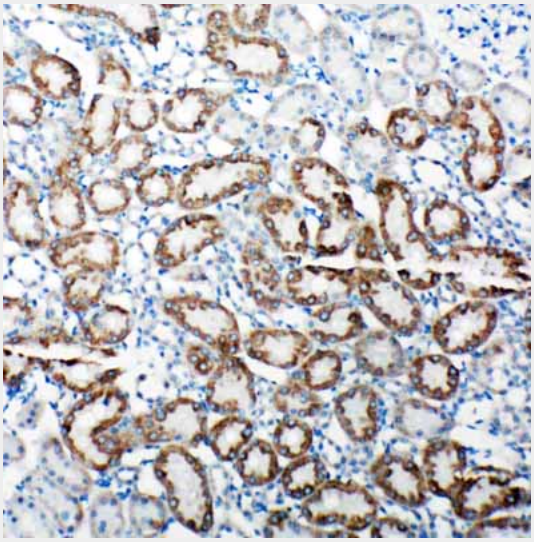
Anti-TRAM1 Antibody - Images



Anti-TRAM1 antibody, ABO11317, Western blottingLane 1: Rat Brain Tissue LysateLane 2: Rat Kidney Tissue LysateLane 3: 293T Cell LysateLane 4: RAJI Cell LysateLane 5: JURKAT Cell Lysate



Anti-TRAM1 antibody, ABO11317, IHC(P)IHC(P): Human Lung Cancer Tissue



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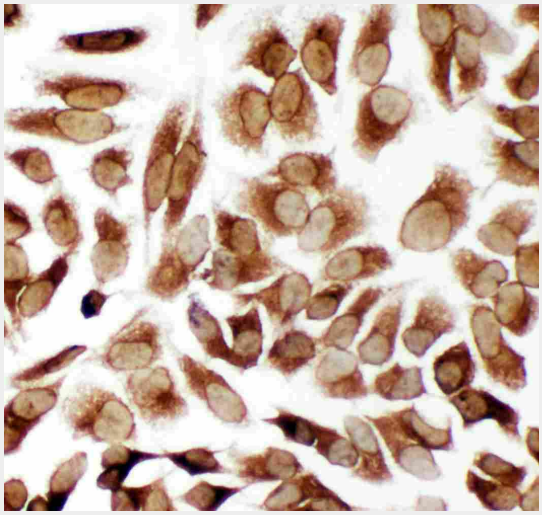
Anti-TRAM1 antibody, ABO11317, IHC(P)IHC(P): Rat Kidney Tissue



Anti-TRAM1 antibody, ABO11317, ICCICC: HELA Cell

Anti-TRAM1 Antibody - Background

TRAM1(Translocation-Associating Membrane Protein 1), By crosslinking and reconstitution of canine proteoliposomes, followed by microsequencing and PCR screening of canine kidney and HeLa cell cDNA libraries, Gorlich et al.(1992) isolated cDNAs encoding TRAM(translocating chain-associating membrane protein). The International Radiation Hybrid Mapping Consortium mapped the TRAM gene to chromosome 8. Sequence analysis predicted that human TRAM is a 374-amino acid, 8-pass transmembrane protein that shares 95% amino acid identity with the canine protein. Functional analysis indicated that TRAM influences glycosylation and is stimulatory or required for the translocation of secretory proteins.