

TRIM5 Antibody
Rabbit Polyclonal Antibody
Catalog # ALS11500**Specification**

TRIM5 Antibody - Product Information

Application	WB, IHC-P, IF
Primary Accession	O9C035
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56kDa KDa
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200

TRIM5 Antibody - Additional Information**Gene ID** 85363**Other Names**

Tripartite motif-containing protein 5, 6.3.2.-, RING finger protein 88, TRIM5, RNF88

Target/Specificity

synthetic peptide corresponding to amino acids near the mid-region of human TRIM5a

Reconstitution & Storage

Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles. Store undiluted.

Precautions

TRIM5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TRIM5 Antibody - Protein Information**Name** TRIM5**Synonyms** RNF88**Function**

Capsid-specific restriction factor that prevents infection from non-host-adapted retroviruses. Blocks viral replication early in the life cycle, after viral entry but before reverse transcription. In addition to acting as a capsid-specific restriction factor, also acts as a pattern recognition receptor that activates innate immune signaling in response to the retroviral capsid lattice. Binding to the viral capsid triggers its E3 ubiquitin ligase activity, and in concert with the heterodimeric ubiquitin conjugating enzyme complex UBE2V1- UBE2N (also known as UBC13-UEV1A complex) generates 'Lys-63'-linked polyubiquitin chains, which in turn are catalysts in the autophosphorylation of the MAP3K7/TAK1 complex (includes TAK1, TAB2, and TAB3). Activation of the MAP3K7/TAK1 complex by autophosphorylation results in the induction and expression of NF-kappa-B and MAPK-

responsive inflammatory genes, thereby leading to an innate immune response in the infected cell. Restricts infection by N-tropic murine leukemia virus (N-MLV), equine infectious anemia virus (EIAV), simian immunodeficiency virus of macaques (SIVmac), feline immunodeficiency virus (FIV), and bovine immunodeficiency virus (BIV) (PubMed:17156811). Plays a role in regulating autophagy through activation of autophagy regulator BECN1 by causing its dissociation from its inhibitors BCL2 and TAB2 (PubMed:25127057). Also plays a role in autophagy by acting as a selective autophagy receptor which recognizes and targets HIV-1 capsid protein p24 for autophagic destruction (PubMed:25127057).

Cellular Location

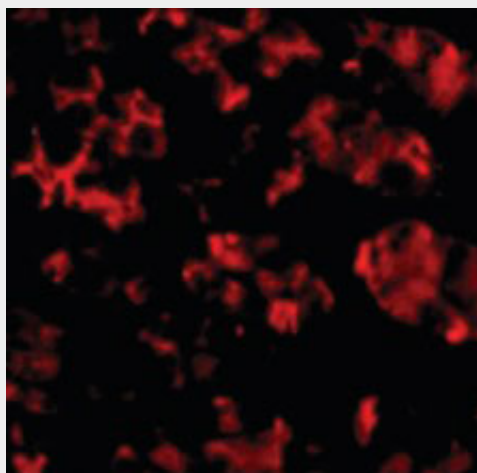
Cytoplasm. Nucleus {ECO:0000250|UniProtKB:Q0PF16}. Note=Predominantly localizes in cytoplasmic bodies (PubMed:12878161, PubMed:20357094). Localization may be influenced by the coexpression of other TRIM proteins, hence partial nuclear localization is observed in the presence of TRIM22 or TRIM27 (By similarity). In cytoplasmic bodies, colocalizes with proteasomal subunits and SQSTM1 (By similarity). {ECO:0000250|UniProtKB:Q0PF16, ECO:0000269|PubMed:12878161, ECO:0000269|PubMed:20357094, ECO:0000269|PubMed:25127057}

TRIM5 Antibody - Protocols

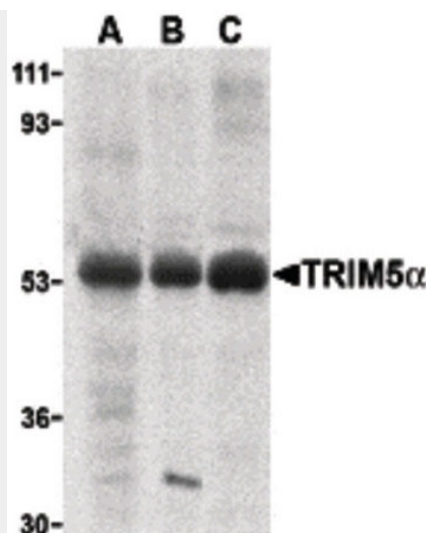
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TRIM5 Antibody - Images



Immunofluorescence of TRIM5 alpha in Human Stomach cells with TRIM5 alpha antibody at 10 ug/ml.



Western blot of TRIM5 alpha expression in human stomach (A), thymus (B), and uterus (C) cell...

TRIM5 Antibody - Background

Capsid-specific restriction factor that prevents infection from non-host-adapted retroviruses. Blocks viral replication early in the life cycle, after viral entry but before reverse transcription. In addition to acting as a capsid-specific restriction factor, also acts as a pattern recognition receptor that activates innate immune signaling in response to the retroviral capsid lattice. Binding to the viral capsid triggers its E3 ubiquitin ligase activity, and in concert with the heterodimeric ubiquitin conjugating enzyme complex UBE2V1-UBE2N (also known as UBC13-UEV1A complex) generates 'Lys-63'-linked polyubiquitin chains, which in turn are catalysts in the autophosphorylation of the MAP3K7/TAK1 complex (includes TAK1, TAB2, and TAB3). Activation of the MAP3K7/TAK1 complex by autophosphorylation results in the induction and expression of NF- kappa-B and MAPK-responsive inflammatory genes, thereby leading to an innate immune response in the infected cell. Restricts infection by N-tropic murine leukemia virus (N-MLV) and equine infectious anemia virus (EIAV).

TRIM5 Antibody - References

- Reymond A.,et al.EMBO J. 20:2140-2151(2001).
- Yap M.W.,et al.Proc. Natl. Acad. Sci. U.S.A. 101:10786-10791(2004).
- Sawyer S.L.,et al.Curr. Biol. 16:95-100(2006).
- Yamauchi K.,et al.FEBS J. 275:1540-1555(2008).
- Battivelli E.,et al.J. Virol. 85:7828-7835(2011).