

Goat Anti-TRIM5 / RNF88 Antibody
Peptide-affinity purified goat antibody
Catalog # AF2112a

Specification

Goat Anti-TRIM5 / RNF88 Antibody - Product Information

Application	WB, IHC
Primary Accession	O9C035
Other Accession	NP_149084 , 85363
Reactivity	Human
Host	Goat
Clonality	Polyclonal
Concentration	100ug/200ul
Isotype	IgG
Calculated MW	56338

Goat Anti-TRIM5 / RNF88 Antibody - Additional Information

Gene ID 85363

Other Names

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

Format

0.5 mg IgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Goat Anti-TRIM5 / RNF88 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Goat Anti-TRIM5 / RNF88 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}

Goat Anti-TRIM5 / RNF88 Antibody - Protocols

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

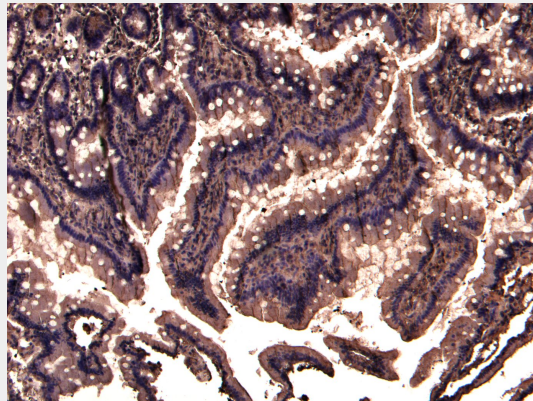
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Goat Anti-TRIM5 / RNF88 Antibody - Images

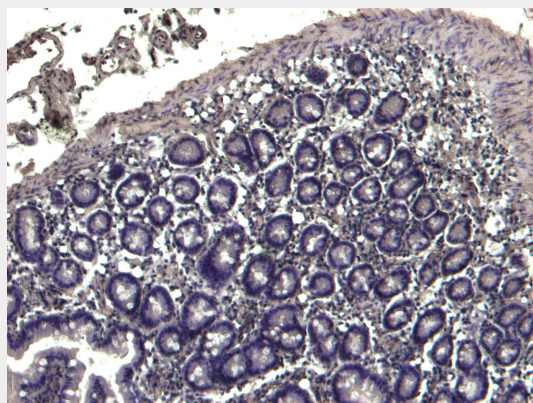




EB05932 (1.0 μ g/ml) staining of Human Thymus lysate (35 μ g protein in RIPA buffer) with (B) and without (A) blocking with the immunizing peptide. Detected by chemiluminescence.



EB05932 (3 μ g/ml) staining of paraffin embedded Human Colon. Heat induced antigen retrieval with citrate buffer pH 6, HRP-staining.



EB05932 Negative Control showing staining of paraffin embedded Human Colon, with no primary antibody.

Goat Anti-TRIM5 / RNF88 Antibody - Background

The protein encoded by this gene is a member of the tripartite motif (TRIM) family. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. The protein forms homo-oligomers via the coiled-coil region and localizes to cytoplasmic

bodies. It appears to function as a E3 ubiquitin-ligase and ubiquitinates itself to regulate its subcellular localization. It may play a role in retroviral restriction. Multiple alternatively spliced transcript variants encoding different isoforms have been described for this gene.

Goat Anti-TRIM5 / RNF88 Antibody - References

Murine double minute 2 as a modulator of retroviral restrictions mediated by TRIM5alpha. Malbec M, et al. Virology, 2010 Sep 30. PMID 20619429.

A TRIM5alpha exon 2 polymorphism is associated with protection from HIV-1 infection in the Pumwani sex worker cohort. Price H, et al. AIDS, 2010 Jul 31. PMID 20588169.

p62/sequestosome-1 associates with and sustains the expression of retroviral restriction factor TRIM5alpha. O'Connor C, et al. J Virol, 2010 Jun. PMID 20357094.

Hsp70 interacts with the retroviral restriction factor TRIM5alpha and assists the folding of TRIM5alpha. Hwang CY, et al. J Biol Chem, 2010 Mar 5. PMID 20053985.

Anti-retroviral activity of TRIM5 alpha. Nakayama EE, et al. Rev Med Virol, 2010 Mar. PMID 20049904.