

### TRIM5 / RNF88 (alpha isoform) Antibody (internal region)

Peptide-affinity purified goat antibody Catalog # AF2491a

### **Specification**

## TRIM5 / RNF88 (alpha isoform) Antibody (internal region) - Product Information

Application IHC, E
Primary Accession O9C035

Other Accession <u>NP\_149023.1</u>, <u>85363</u>

Predicted Human
Host Goat
Clonality Polyclonal
Concentration 0.5 mg/ml

Isotype IgG
Calculated MW 56338

## TRIM5 / RNF88 (alpha isoform) Antibody (internal region) - Additional Information

#### **Gene ID 85363**

#### **Other Names**

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

#### **Dilution**

IHC~~1:100~500

E~~N/A

#### **Format**

0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 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**

TRIM5 / RNF88 (alpha isoform) Antibody (internal region) is for research use only and not for use in diagnostic or therapeutic procedures.

## TRIM5 / RNF88 (alpha isoform) Antibody (internal region) - 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:<a

href="http://www.uniprot.org/citations/17156811" target="\_blank">17156811</a>). Plays a role in regulating autophagy through activation of autophagy regulator BECN1 by causing its dissociation from its inhibitors BCL2 and TAB2 (PubMed:<a

href="http://www.uniprot.org/citations/25127057" target="\_blank">25127057</a>). 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:<a

href="http://www.uniprot.org/citations/25127057" target=" blank">25127057</a>).

#### **Cellular Location**

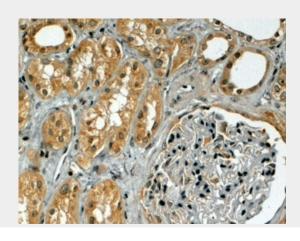
Cytoplasm. Nucleus {ECO:0000250|UniProtKB:Q0PF16}. Note=Predominantly localizes in cytoplasmic bodies (PubMed:12878161, PubMed:20357094). Localization may be influenced by the coexpression of other TRIM proteins, hence partial nuclear localization is observed in the presence of TRIM22 or TRIM27 (By similarity). 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 / RNF88 (alpha isoform) Antibody (internal region) - Protocols

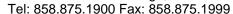
Provided below are standard protocols that you may find useful for product applications.

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

### TRIM5 / RNF88 (alpha isoform) Antibody (internal region) - Images









AF2491a (4 µg/ml) staining of paraffin embedded Human Kidney. Steamed antigen retrieval with citrate buffer pH 6, HRP-staining.

# TRIM5 / RNF88 (alpha isoform) Antibody (internal region) - Background

This antibody is expected to recognise isoform alpha (NP 149023.1) only.

### TRIM5 / RNF88 (alpha isoform) Antibody (internal region) - References

Cyclophilin A is required for TRIM5{alpha}-mediated resistance to HIV-1 in Old World monkey cells. Berthoux L, Sebastian S, Sokolskaja E, Luban J. Proc Natl Acad Sci U S A. 2005 Oct 11;102(41):14849-53. Epub 2005 Oct 3. PMID: 16203999