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TRIM22 Antibody(N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19529a

Product Information

Application	WB, E
Primary Accession	Q8IYM9
Other Accession	NP_006065.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33242
Calculated MW	56947
Antigen Region	67-96

Additional Information

Gene ID	10346
Other Names	E3 ubiquitin-protein ligase TRIM22, 632-, 50 kDa-stimulated trans-acting factor, RING finger protein 94, Staf-50, Tripartite motif-containing protein 22, TRIM22, RNF94, STAF50
Target/Specificity	This TRIM22 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 67-96 amino acids from the N-terminal region of human TRIM22.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	TRIM22 Antibody(N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TRIM22
Synonyms	RNF94, STAF50

Function	Interferon-induced E3 ubiquitin ligase that plays important roles in innate and adaptive immunity (PubMed:25683609, PubMed:35777501). Restricts the replication of many viruses including HIV-1, encephalomyocarditis virus (EMCV), hepatitis B virus (HBV), hepatitis C virus (HCV) or Zika virus (ZIKV) (PubMed:25683609, PubMed:35777501, PubMed:36042495). Mechanistically, negatively regulates HCV replication by promoting ubiquitination and subsequent degradation of viral NS5A (PubMed:25683609). Also acts by promoting the degradation of Zika virus NS1 and NS3 proteins through proteasomal degradation (PubMed:36042495). Acts as a suppressor of basal HIV-1 LTR- driven transcription by preventing Sp1 binding to the HIV-1 promoter (PubMed:26683615). Also plays a role in antiviral immunity by co-regulating together with NT5C2 the RIGI/NF-kappa-B pathway by promoting 'Lys-63'-linked ubiquitination of RIGI, while NT5C2 is responsible for 'Lys-48'-linked ubiquitination of RIGI (PubMed:36159777). Participates in adaptive immunity by suppressing the amount of MHC class II protein in a negative feedback manner in order to limit the extent of MHC class II induction (PubMed:35777501).
Cellular Location	Cytoplasm. Nucleus Nucleus speckle. Nucleus, Cajal body. Note=Localizes predominantly to the nucleus, found in cytoplasm to some extent. Forms distinct nuclear bodies that undergo dynamic changes during cell cycle progression Nuclear bodies start to form in the early G0/G1 phase but become speckle-like in the S-phase and completely dispersed in mitosis. 35% of TRIM22 nuclear bodies overlap or are found adjacent to Cajal bodies
Tissue Location	Strongly expressed in peripheral blood leukocytes, spleen, thymus, and ovary. Expressed at basal levels in other tissues

Background

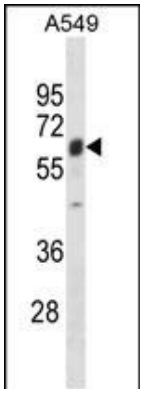
The protein encoded by this gene is a member of the tripartite motif (TRIM) family. The TRIM motif includes three zinc-binding domains, a RING, a B-box type 1 and a B-box type 2, and a coiled-coil region. This protein localizes to the cytoplasm and its expression is induced by interferon. The protein down-regulates transcription from the HIV-1 LTR promoter region, suggesting that function of this protein may be to mediate interferon's antiviral effects.

References

Kajaste-Rudnitski, A., et al. Amino Acids 39(1):1-9(2010)
Petersson, J., et al. Exp. Cell Res. 316(4):568-579(2010)
Ovsyannikova, I.G., et al. Hum. Genet. 127(2):207-221(2010)
Ovsyannikova, I.G., et al. J. Infect. Dis. 201(2):207-213(2010)
Gao, B., et al. Hepatology 50(2):424-433(2009)

Images

TRIM22 Antibody (N-term) (Cat. #AP19529a) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the TRIM22 antibody detected the TRIM22 protein (arrow).



Citations

- TRIM22 regulates macrophage autophagy and enhances Mycobacterium tuberculosis clearance by targeting the nuclear factor-multiplicity κB/beclin 1 pathway.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.