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TRIM22 antibody - N-terminal region

Rabbit Polyclonal Antibody
Catalog # AI16256

Product Information

Application	WB
Primary Accession	Q8IYM9
Other Accession	NM_006074, NP_006065
Reactivity	Human
Predicted	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	56947

Additional Information

Gene ID	10346
Alias Symbol	GPSTAF50, RNF94, STAF50
Other Names	E3 ubiquitin-protein ligase TRIM22, 6.3.2.-, 50 kDa-stimulated trans-acting factor, RING finger protein 94, Staf-50, Tripartite motif-containing protein 22, TRIM22, RNF94, STAF50
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-TRIM22 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	TRIM22 antibody - N-terminal region 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

Interferon-induced antiviral protein involved in cell innate immunity. The antiviral activity could in part be mediated by TRIM22-dependent ubiquitination of viral proteins. Plays a role in restricting the replication of HIV-1, encephalomyocarditis virus (EMCV) and hepatitis B virus (HBV). Acts as a transcriptional repressor of HBV core promoter. May have E3 ubiquitin-protein ligase activity.

References

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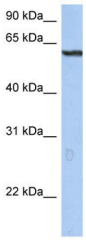
Duan Z.,et al.Biochem. Biophys. Res. Commun. 374:502-506(2008).
Barr S.D.,et al.PLoS Pathog. 4:E1000007-E1000007(2008).

Images



WB Suggested Anti-TRIM22 Antibody Titration: 0.2-1 µg/ml
Positive Control: Human brain