

TRIM56 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP11813b

Product Information

Application	WB, E
Primary Accession	<u>Q9BRZ2</u>
Other Accession	<u>NP_112223.1</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB29689
Calculated MW	81488
Antigen Region	727-755

Additional Information

Gene ID	81844
Other Names	E3 ubiquitin-protein ligase TRIM56, 632-, RING finger protein 109, Tripartite motif-containing protein 56, TRIM56, RNF109
Target/Specificity	This TRIM56 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 727-755 amino acids from the C-terminal region of human TRIM56.
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	TRIM56 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TRIM56 {ECO:0000303 PubMed:21289118, ECO:0000312 HGNC:HGNC:19028}
Function	E3 ubiquitin-protein ligase that plays a key role in innate antiviral immunity by mediating ubiquitination of CGAS and STING1 (PubMed: <u>21289118</u> ,

	PubMed: <u>29426904</u>). In response to pathogen- and host- derived double-stranded DNA (dsDNA), targets STING1 to 'Lys-63'-linked ubiquitination, thereby promoting its homodimerization, a step required for the production of type I interferon IFN-beta (By similarity). Also mediate monoubiquitination of CGAS, thereby promoting CGAS oligomerization and subsequent activation (PubMed: <u>29426904</u>). Promotes also TNFalpha-induced NF-kappa-B signaling by mediating 'Lys-63'-linked ubiquitination TAK1, leading to enhanced interaction between TAK1 and CHUK/IKKalpha (PubMed: <u>35952808</u>). Independently of its E3 ubiquitin ligase activity, positive regulator of TLR3 signaling. Potentiates extracellular double stranded RNA (dsRNA)-induced expression of IFNB1 and interferon-stimulated genes ISG15, IFIT1/ISG56, CXCL10, OASL and CCL5/RANTES (PubMed: <u>22948160</u>). Promotes establishment of an antiviral state by TLR3 ligand and TLR3-mediated chemokine induction following infection by hepatitis C virus (PubMed: <u>22948160</u>). Acts as a restriction factor of Zika virus through direct interaction with the viral RNA via its C-terminal region (PubMed: <u>31251739</u>).
Cellular Location	Cytoplasm.
Tissue Location	Widely expressed (at protein level).

Background

TRIM56 belongs to the TRIM/RBCC family. It contains 2 B box-type zinc fingers and a RING-type zinc finger. There are 3 named isoforms produced by alternative splicing.

References

Olsen, J.V., et al. Cell 127(3):635-648(2006) Olsen, J.V., et al. Cell 127(3):635-648(2006)

Images



TRIM56 Antibody (C-term) (Cat. #AP11813b) western blot analysis in A375 cell line lysates (35ug/lane).This demonstrates the TRIM56 antibody detected the TRIM56 protein (arrow).

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