

TRIB1 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7726b

Product Information

Application	WB, E
Primary Accession	<u>Q96RU8</u>
Other Accession	<u>Q8K4K4</u>
Reactivity	Human, Mouse
Predicted	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB9762
Calculated MW	41009
Antigen Region	341-370

Additional Information

Gene ID	10221
Other Names	Tribbles homolog 1, TRB-1, G-protein-coupled receptor-induced gene 2 protein, GIG-2, SKIP1, TRIB1 (<u>HGNC:16891</u>)
Target/Specificity	This TRIB1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 341-370 amino acids from the C-terminal region of human TRIB1.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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	TRIB1 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TRIB1 (<u>HGNC:16891</u>)
Function	Adapter protein involved in protein degradation by interacting with COP1 ubiquitin ligase (PubMed: <u>27041596</u>). The COP1- binding motif is masked by

autoinhibitory interactions with the protein kinase domain (PubMed:<u>26455797</u>). Serves to alter COP1 substrate specificity by directing the activity of COP1 toward CEBPA (PubMed:<u>27041596</u>). Binds selectively the recognition sequence of CEBPA (PubMed:<u>26455797</u>). Regulates myeloid cell differentiation by altering the expression of CEBPA in a COP1-dependent manner (By similarity). Controls macrophage, eosinophil and neutrophil differentiation via the COP1-binding domain (By similarity). Interacts with MAPK kinases and regulates activation of MAP kinases, but has no kinase activity (PubMed:<u>15299019</u>, PubMed:<u>26455797</u>).

Tissue Location

Expressed in most human tissues with the highest levels in skeletal muscle, thyroid gland, pancreas, peripheral blood leukocytes, and bone marrow.

Background

TRIB1 antibody, also called gprotein coupled receptor induced, skip1, gig2, c8fwATP, functions in binding protein binding, protein kinase inhibitor activity, and protein serine/threonine kinase activities. Overexpression of TRIB1 in HeLa cells repressed the basal activity of the IL8 promoter by inhibiting AP1 activity. Overexpression of TRIB1 inhibited oncogenic Ras -driven AP1 activation and MEKK1-mediated AP1 activation. ERK activation was enhanced by TRIB1. Coimmunoprecipitation and yeast 2-hybrid assays showed that MEK1 interacted with both TRIB1 and TRIB3, and MKK4 interacted specifically with TRIB1. Cotransfection of MKK4 enhanced the level of TRIB1, indicating that the TRIB-MAPKK interaction stabilized TRIB1.

References

Kiss-Toth, E., et al., J. Biol. Chem. 279(41):42703-42708 (2004). Wu, M., et al., J. Biol. Chem. 278(29):27072-27079 (2003). Wilkin, F., et al., Eur. J. Biochem. 248(3):660-668 (1997).

Images



Western blot analysis of anti-TRIB1 Pab (AP7726b) in T47D cell line lysate (35ug/lane). TRIB1(arrow) was detected using the purified Pab.

Citations

- An improvement in skeletal muscle mitochondrial capacity with short-term aerobic training is associated with changes in Tribbles 1 expression
- Sin3A-associated protein, 18 kDa, a novel binding partner of TRIB1, regulates MTTP expression.
- TRIB1 downregulates hepatic lipogenesis and glycogenesis via multiple molecular interactions.
- Identification of tribbles-1 as a novel binding partner of Foxp3 in regulatory T cells.

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