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TRIB3 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8157b

Product Information

Application	WB, E
Primary Accession	Q96RU7
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB4072
Calculated MW	39578
Antigen Region	301-331

Additional Information

Gene ID	57761
Other Names	Tribbles homolog 3, TRB-3, Neuronal cell death-inducible putative kinase, SINK, p65-interacting inhibitor of NF-kappa-B, TRIB3, C20orf97, NIPK, SKIP3, TRB3
Target/Specificity	This TRIB3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 301-331 amino acids from the C-terminal region of human TRIB3.
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 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	TRIB3 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TRIB3
Synonyms	C20orf97, NIPK, SKIP3, TRB3
Function	Inactive protein kinase which acts as a regulator of the integrated stress

response (ISR), a process for adaptation to various stress (PubMed:15775988, PubMed:15781252). Inhibits the transcriptional activity of DDIT3/CHOP and is involved in DDIT3/CHOP-dependent cell death during ER stress (PubMed:15775988, PubMed:15781252). May play a role in programmed neuronal cell death but does not appear to affect non-neuronal cells (PubMed:15775988, PubMed:15781252). Acts as a negative feedback regulator of the ATF4-dependent transcription during the ISR: while TRIB3 expression is promoted by ATF4, TRIB3 protein interacts with ATF4 and inhibits ATF4 transcription activity (By similarity). Disrupts insulin signaling by binding directly to Akt kinases and blocking their activation (By similarity). May bind directly to and mask the 'Thr-308' phosphorylation site in AKT1 (By similarity). Interacts with the NF-kappa-B transactivator p65 RELA and inhibits its phosphorylation and thus its transcriptional activation activity (PubMed:12736262). Interacts with MAPK kinases and regulates activation of MAP kinases (PubMed:15299019). Can inhibit APOBEC3A editing of nuclear DNA (PubMed:22977230).

Cellular Location Nucleus.

Tissue Location Highest expression in liver, pancreas, peripheral blood leukocytes and bone marrow. Also highly expressed in a number of primary lung, colon and breast tumors. Expressed in spleen, thymus, and prostate and is undetectable in other examined tissues, including testis, ovary, small intestine, colon, leukocyte, heart, brain, placenta, lung, skeletal muscle, and kidney

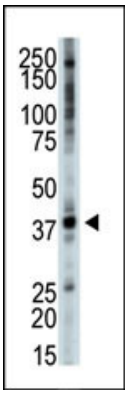
Background

NPK is a putative protein kinase that is induced by the transcription factor NF-kappaB. The encoded protein is a negative regulator of NF-kappaB and can also sensitize cells to TNF- and TRAIL-induced apoptosis. In addition, this protein can negatively regulate the cell survival serine-threonine kinase AKT1.

References

Wu, M., et al., J. Biol. Chem. 278(29):27072-27079 (2003).
Du, K., et al., Science 300(5625):1574-1577 (2003).
Bowers, A.J., et al., Oncogene 22(18):2823-2835 (2003).

Images



The anti-NPK Pab (Cat. #AP8157b) is used in Western blot to detect NPK in mouse skeletal muscle tissue lysate.

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