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TRB3 / TRIB3 Antibody (Internal)
Rabbit Polyclonal Antibody
Catalog # ALS16419

Specification

TRB3 / TRIB3 Antibody (Internal) - Product Information

Application	**WB, IHC-P, IF, E**
Primary Accession	Q96RU7
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**40kDa KDa**
Dilution	**WB~~1:1000** **IHC-P~~N/A** **IF~~1:50~200** **E~~N/A**

TRB3 / TRIB3 Antibody (Internal) - 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
TRB3 antibody is human, mouse and rat reactive. At least two isoforms of TRB3 are known to exist; this antibody will detect both isoforms.

Reconstitution & Storage
Long term: -20°C; Short term: +4°C. Avoid repeat freeze-thaw cycles.

Precautions
TRB3 / TRIB3 Antibody (Internal) is for research use only and not for use in diagnostic or therapeutic procedures.

TRB3 / TRIB3 Antibody (Internal) - 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:<a

href="http://www.uniprot.org/citations/15775988" target="_blank">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.

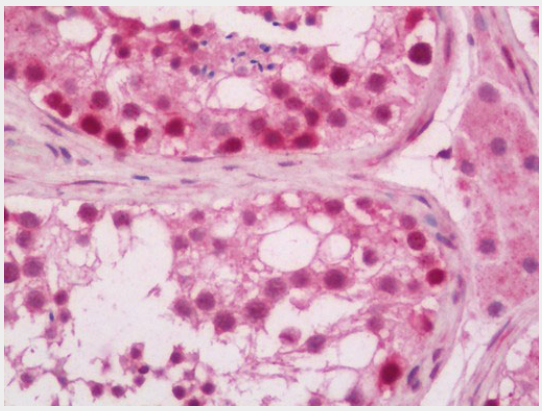
Tissue Location
Highest expression in liver, pancreas, peripheral blood leukocytes and bone marrow. Also highly expressed in a number of primary lung, colon and breast tumors. Expressed in spleen, thymus, and prostate and is undetectable in other examined tissues, including testis, ovary, small intestine,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

TRB3 / TRIB3 Antibody (Internal) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

TRB3 / TRIB3 Antibody (Internal) - Images



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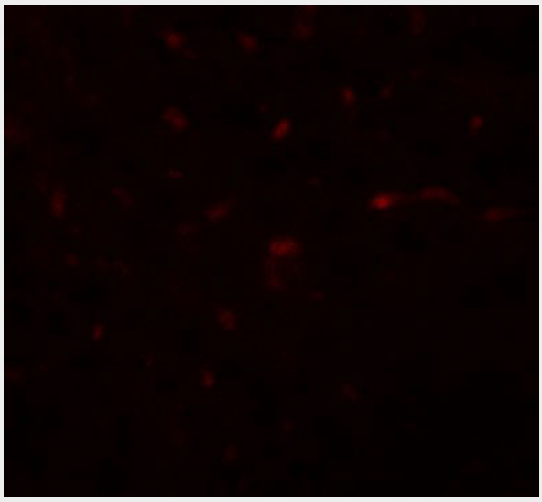
Human Testis: Formalin-Fixed, Paraffin-Embedded (FFPE)



Immunofluorescence of TRB3 in mouse liver tissue with TRB3 antibody at 20 ug/mL.

TRB3 / TRIB3 Antibody (Internal) - Background

Disrupts insulin signaling by binding directly to Akt kinases and blocking their activation. May bind directly to and mask the 'Thr-308' phosphorylation site in AKT1. Binds to ATF4 and inhibits its transcriptional activation activity. Interacts with the NF-kappa-B transactivator p65 RELA and inhibits its phosphorylation and thus its transcriptional activation activity. Interacts with MAPK kinases and regulates activation of MAP kinases. May play a role in programmed neuronal cell death but does not appear to affect non-neuronal cells. Does not display kinase activity. Inhibits the transcriptional activity of DDIT3/CHOP and is involved in DDIT3/CHOP-dependent cell death during ER stress. Can inhibit APOBEC3A editing of nuclear DNA.

TRB3 / TRIB3 Antibody (Internal) - References

Bowers A.J.,et al.Oncogene 22:2823-2835(2003).
Wu M.,et al.J. Biol. Chem. 278:27072-27079(2003).
Kiss-Toth E.,et al.J. Biol. Chem. 279:42703-42708(2004).
Ord D.,et al.Biochem. Biophys. Res. Commun. 330:210-218(2005).
Shan Y.X.,et al.Submitted (MAR-2003) to the EMBL/GenBank/DDBJ databases.