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Anti-TRIB3 Monoclonal Antibody

Catalog # ABO14681

Product Information

Application	WB, IP
Primary Accession	Q96RU7
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-TRIB3 Monoclonal Antibody . Tested in WB, IP applications. This antibody reacts with Human.

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
Calculated MW	39578
Application Details	WB 1:1000-1:5000 IP 1:20
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: AEIE-20
Immunogen	A synthesized peptide derived from human TRIB3 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.
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

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

Images

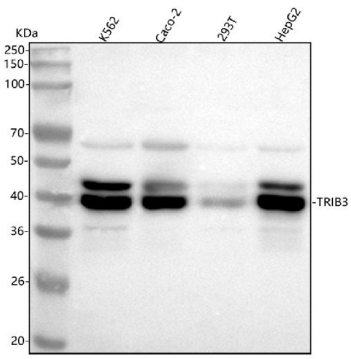


Figure 1. Western blot analysis of TRIB3 using anti-TRIB3 antibody (M01414).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions.
Lane 1: human K562 whole cell lysates,
Lane 2: human CACO-2 whole cell lysates,
Lane 3: human 293T whole cell lysates,
Lane 4: human HepG2 whole cell lysates.
After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-TRIB3 antigen affinity purified monoclonal antibody (Catalog # M01414) at 1:1000 overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:1000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for TRIB3 at approximately 40 kDa. The expected band size for TRIB3 is at 40 kDa.

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