

# Anti-TRIB3 Monoclonal Antibody

Catalog # ABO14681

#### Specification

## Anti-TRIB3 Monoclonal Antibody - Product Information

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

## Anti-TRIB3 Monoclonal Antibody - 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 40 kDa KDa

Application Details WB 1:1000-1:5000<br>IP 1:20

#### 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.

#### 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.

## **Anti-TRIB3 Monoclonal Antibody - 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:<a href="http://www.uniprot.org/citations/15775988" target=" blank">15775988</a>, PubMed:<a href="http://www.uniprot.org/citations/15781252" target=" blank">15781252</a>). 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</a>, PubMed:<a href="http://www.uniprot.org/citations/15781252" target=" blank">15781252</a>). May play a role in programmed neuronal cell death but does not appear to affect non-neuronal cells (PubMed:<a href="http://www.uniprot.org/citations/15775988" target=" blank">15775988</a>, PubMed:<a href="http://www.uniprot.org/citations/15781252" target="\_blank">15781252</a>). 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:<a href="http://www.uniprot.org/citations/12736262" target=" blank">12736262</a>). Interacts with MAPK kinases and regulates activation of MAP kinases (PubMed:<a href="http://www.uniprot.org/citations/15299019" target="\_blank">15299019</a>). Can inhibit APOBEC3A editing of nuclear DNA (PubMed:<a href="http://www.uniprot.org/citations/22977230" target=" blank">22977230</a>).

**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

# Anti-TRIB3 Monoclonal Antibody - 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
- <u>Cell Culture</u>

#### Anti-TRIB3 Monoclonal Antibody - 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.