

TRIM47 (L-13): sc-136939

BACKGROUND

The tripartite motif (TRIM) family of proteins are characterized by a conserved TRIM domain that includes a coiled-coil region, a B-box type zinc finger, one RING finger and three zinc-binding domains. TRIM47 (tripartite motif-containing 47), also known as GOA (gene overexpressed in astrocytoma protein) or RNF100 (RING finger protein 100), is a 638 amino acid protein that localizes to both cytoplasm and nucleus and belongs to the TRIM/RBCC family. While TRIM47 expression is low in most tissues, it is highly expressed in kidney tubular cells and overexpressed in astrocytoma tumor cells. Containing one B box-type zinc finger, B30.2/SPRY domain and a RING-type zinc finger, the gene encoding TRIM47 maps to human chromosome 17q25.1.

REFERENCES

- Vandeputte, D.A., et al. 2001. GOA, a novel gene encoding a ring finger B-box coiled-coil protein, is overexpressed in astrocytoma. *Biochem. Biophys. Res. Commun.* 286: 574-579.
- Dingus, J., et al. 2002. Purification of G protein isoforms GOA and GOC from bovine brain. *Meth. Enzymol.* 344: 176-185.
- Beausoleil, S.A., et al. 2006. A probability-based approach for high-throughput protein phosphorylation analysis and site localization. *Nat. Biotechnol.* 24: 1285-1292.
- Online Mendelian Inheritance in Man, OMIM™. 2007. Johns Hopkins University, Baltimore, MD. MIM Number: 611041. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Sardiello, M., et al. 2008. Genomic analysis of the TRIM family reveals two groups of genes with distinct evolutionary properties. *BMC Evol. Biol.* 8: 225.
- Ozato, K., et al. 2008. TRIM family proteins and their emerging roles in innate immunity. *Nat. Rev. Immunol.* 8: 849-860.
- van der Aa, L.M., et al. 2009. A large new subset of TRIM genes highly diversified by duplication and positive selection in teleost fish. *BMC Biol.* 7: 7.

CHROMOSOMAL LOCATION

Genetic locus: TRIM47 (human) mapping to 17q25.1; Trim47 (mouse) mapping to 11 E2.

SOURCE

TRIM47 (L-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRIM47 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-136939 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRIM47 (L-13) is recommended for detection of TRIM47 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000); non cross-reactive with other TRIM family members.

TRIM47 (L-13) is also recommended for detection of TRIM47 in additional species, including bovine.

Suitable for use as control antibody for TRIM47 siRNA (h): sc-93720, TRIM47 siRNA (m): sc-154655, TRIM47 shRNA Plasmid (h): sc-93720-SH, TRIM47 shRNA Plasmid (m): sc-154655-SH, TRIM47 shRNA (h) Lentiviral Particles: sc-93720-V and TRIM47 shRNA (m) Lentiviral Particles: sc-154655-V.

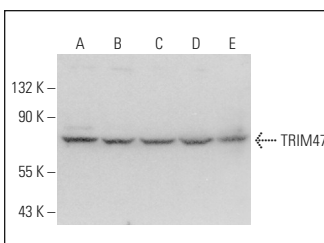
Molecular Weight of TRIM47: 70 kDa.

Positive Controls: A549 cell lysate: sc-2413, HeLa whole cell lysate: sc-2200 or HEK293 whole cell lysate: sc-45136.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



TRIM47 (L-13): sc-136939. Western blot analysis of TRIM47 expression in A549 (A), HeLa (B), HEK293 (C) and THP-1 (D) whole cell lysates and mouse brain tissue extract (E).

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.