

TRIM2 (N-17): sc-79163

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. TRIM2 (tripartite motif-containing 2), also known as RNF86, is a 744 amino acid protein that localizes to cytoplasmic filaments and contains a variety of domains that are characteristic to TRIM proteins, including a RING-type zinc finger and a B box-type zinc finger, as well as one filamin repeat and six NHL repeats. Via its NHL repeats, TRIM2 interacts with Myosin V and is thought to contribute to the alternation of neural cellular mechanisms, possibly protecting cells from neurodegeneration. The gene encoding TRIM2 maps to human chromosome 4, which encodes nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes.

REFERENCES

1. Reymond, A., et al. 2001. The tripartite motif family identifies cell compartments. *EMBO J.* 20: 2140-2151.
2. Ohkawa, N., et al. 2001. Molecular cloning and characterization of neural activity-related RING finger protein (NARF): a new member of the RBCC family is a candidate for the partner of Myosin V. *J. Neurochem.* 78: 75-87.
3. Meroni, G. and Diez-Roux, G. 2005. TRIM/RBCC, a novel class of "single protein RING finger" E3 ubiquitin ligases. *Bioessays* 27: 1147-1157.
4. 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.
5. Bowie, A.G. 2008. TRIM-ing down Tolls. *Nat. Immunol.* 9: 348-350.
6. Ozato, K., et al. 2008. TRIM family proteins and their emerging roles in innate immunity. *Nat. Rev. Immunol.* 8: 849-860.

CHROMOSOMAL LOCATION

Genetic locus: TRIM2 (human) mapping to 4q31.3; Trim2 (mouse) mapping to 3 F1.

SOURCE

TRIM2 (N-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TRIM2 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-79163 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

TRIM2 (N-17) is recommended for detection of TRIM2 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).

TRIM2 (N-17) is also recommended for detection of TRIM2 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for TRIM2 siRNA (h): sc-76742, TRIM2 siRNA (m): sc-76743, TRIM2 shRNA Plasmid (h): sc-76742-SH, TRIM2 shRNA Plasmid (m): sc-76743-SH, TRIM2 shRNA (h) Lentiviral Particles: sc-76742-V and TRIM2 shRNA (m) Lentiviral Particles: sc-76743-V.

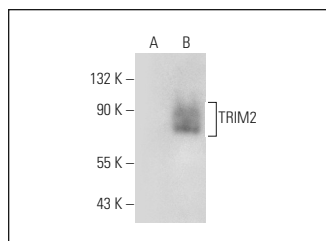
Molecular Weight of TRIM2: 82 kDa.

Positive Controls: TRIM2 (h): 293T Lysate: sc-375136.

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



TRIM2 (N-17): sc-79163. Western blot analysis of TRIM2 expression in non-transfected: sc-110760 (A) and human TRIM2 transfected: sc-375136 (B) whole cell lysates.

RESEARCH USE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.