

TRIM46 (T-14): sc-104716

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. TRIM46 (tripartite motif-containing 46), also known as TRIFIC or GENEY, is a 759 amino acid intracellular protein that contains a variety of domains that are characteristic to TRIM proteins, including a RING-type zinc finger and a B box-type zinc finger. All subclass members, including TRIM46, TRIM9, TRIM67 and TRIM36, have conserved domain arrangement and associate with microtubule cytoskeleton, which may suggest that subcellular compartmentalization is determined by the unique domain architecture. The gene encoding TRIM46 is located on human chromosome 1, which spans about 260 million base pairs and comprises nearly 8% of the human genome.

REFERENCES

- Vos, H.L., et al. 1995. A tightly organized, conserved gene cluster on mouse chromosome 3 (E3-F1). *Mamm. Genome* 6: 820-822.
- Jensen, K., et al. 2001. PML protein isoforms and the RBCC/TRIM motif. *Oncogene* 20: 7223-7233.
- Meroni, G. and Diez-Roux, G. 2005. TRIM/RBCC, a novel class of single protein RING finger E3 ubiquitin ligases. *Bioessays* 27: 1147-1157.
- Short, K.M. and Cox, T.C. 2006. Subclassification of the RBCC/TRIM superfamily reveals a novel motif necessary for microtubule binding. *J. Biol. Chem.* 281: 8970-8980.
- Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 600986. 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.
- 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.
- Carthagen, L., et al. 2009. Human TRIM gene expression in response to interferons. *PLoS ONE* 4: e4894.

CHROMOSOMAL LOCATION

Genetic locus: TRIM46 (human) mapping to 1q22; Trim46 (mouse) mapping to 3 F1.

SOURCE

TRIM46 (T-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TRIM46 of human origin.

STORAGE

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

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-104716 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRIM46 (T-14) is recommended for detection of TRIM46 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.

TRIM46 (T-14) is also recommended for detection of TRIM46 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for TRIM46 siRNA (h): sc-78728, TRIM46 siRNA (m): sc-154654, TRIM46 shRNA Plasmid (h): sc-78728-SH, TRIM46 shRNA Plasmid (m): sc-154654-SH, TRIM46 shRNA (h) Lentiviral Particles: sc-78728-V and TRIM46 shRNA (m) Lentiviral Particles: sc-154654-V.

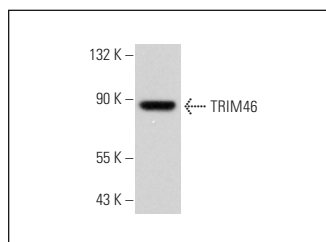
Molecular Weight of TRIM46: 83 kDa.

Positive Controls: mouse testis extract: sc-2405.

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



TRIM46 (T-14): sc-104716. Western blot analysis of TRIM46 expression in mouse testis tissue extract.

RESEARCH USE

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