

TRIM7 (G-17): sc-109107

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. TRIM7 (tripartite motif-containing 7), also known as RNF90 or GNIP, is a 511 amino acid protein that belongs to the TRIM family and contains one RING-type zinc finger, one B box-type zinc finger and one SPRY domain. Expressed in placenta and skeletal muscle and present at lower levels in brain, heart and pancreas, TRIM7 localizes to both the cytoplasm and the nucleus where it exists as dimers and is thought to participate in the initiation of glycogen synthesis. Multiple isoforms of TRIM7 exist due to alternative splicing events.

REFERENCES

- Alonso, M.D., Lomako, J., Lomako, W.M. and Whelan, W.J. 1995. A new look at the biogenesis of glycogen. *FASEB J.* 9: 1126-1137.
- Reymond, A., Meroni, G., Fantozzi, A., Merla, G., Cairo, S., Luzi, L., Riganelli, D., Zanaria, E., Messali, S., Cainarca, S., Guffanti, A., Minucci, S., Pelicci, P.G. and Ballabio, A. 2001. The tripartite motif family identifies cell compartments. *EMBO J.* 20: 2140-2151.
- Skurat, A.V., Dietrich, A.D., Zhai, L. and Roach, P.J. 2002. GNIP, a novel protein that binds and activates glycogenin, the self-glycosylating initiator of glycogen biosynthesis. *J. Biol. Chem.* 277: 19331-19338.
- Zhai, L., Dietrich, A., Skurat, A.V. and Roach, P.J. 2004. Structure-function analysis of GNIP, the glycogenin-interacting protein. *Arch. Biochem. Biophys.* 421: 236-242.
- Online Mendelian Inheritance in Man, OMIM[™]. 2005. Johns Hopkins University, Baltimore, MD. MIM Number: 609315. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Sardiello, M., Cairo, S., Fontanella, B., Ballabio, A. and Meroni, G. 2008. Genomic analysis of the TRIM family reveals two groups of genes with distinct evolutionary properties. *BMC Evol. Biol.* 8: 225.

CHROMOSOMAL LOCATION

Genetic locus: TRIM7 (human) mapping to 5q35.3.

SOURCE

TRIM7 (G-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TRIM7 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-109107 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

TRIM7 (G-17) is recommended for detection of TRIM7 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 TRIM7-2 or TRIM7-3.

Suitable for use as control antibody for TRIM7 siRNA (h): sc-91613, TRIM7 shRNA Plasmid (h): sc-91613-SH and TRIM7 shRNA (h) Lentiviral Particles: sc-91613-V.

Molecular Weight of TRIM7: 57 kDa.

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) 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.

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.