SANTA CRUZ BIOTECHNOLOGY, INC.

TRIM32 (N-12): sc-49265

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Tripartite motif-containing protein 32 (TRIM32) belongs to the tripartite motif (TRIM) protein family. TRIM32, like all TRIM proteins, contains a domain structure composed of a B-box, a RING-finger and a coiled-coil motif. Additionally, TRIM32 has six C-terminal NHL domains; it is expressed mainly in the skeletal muscle. The TRIM32 gene encodes an E3 ubiquitin ligase, a protein that attaches ubiquitin to a lysine residue on a target protein and acts in conjunction with ubiquitin-conjugating enzymes UbcH5a, UbcH5c and UbcH6. Mutations in the TRIM32 gene cause two forms of autosomal recessive muscular dystrophy designated limb girdle muscular dystrophy type 2H (LGMD2H) and sarcotubular myopathy (STM). TRIM32 mutations can also result in Bardet-Biedl syndrome (BBS), an autosomal recessive disorder characterized by pigmentary retinopathy, polydactyly, hypogenitalism, renal abnormalities, learning disabilities and obesity.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602290. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
2. Horn, E.J., et al. 2004. RING protein TRIM32 associated with skin carcinogenesis has anti-apoptotic and E3-ubiquitin ligase properties. Carcinogenesis 25: 157-167.
3. Frosk, P., et al. 2005. Hutterite brothers both affected with two forms of limb girdle muscular dystrophy: LGMD2H and LGMD2I. Eur. J. Hum. Genet. 13: 978-982.
4. Schoser, B.G., et al. 2005. Commonality of TRIM32 mutation in causing sarcotubular myopathy and LGMD2H. Ann. Neurol. 57: 591-595.
5. Guglieri, M., et al. 2005. Molecular etiopathogenesis of limb girdle muscular and congenital muscular dystrophies: boundaries and contiguities. Clin. Chim. Acta 361: 54-79.
6. Kudryashova, E., et al. 2005. TRIM32 is a ubiquitin ligase mutated in limb girdle muscular dystrophy type 2H that binds to skeletal muscle Myosin and ubiquitinates Actin. J. Mol. Biol. 354: 413-424.
7. Chiang, A.P., et al. 2006. Homozygosity mapping with SNP arrays identifies TRIM32, an E3 ubiquitin ligase, as a Bardet-Biedl syndrome gene (BBS11). Proc. Natl. Acad. Sci. USA 103: 6287-6292.

CHROMOSOMAL LOCATION

Genetic locus: TRIM32 (human) mapping to 9q33.1; Trim32 (mouse) mapping to 4 C1.

SOURCE

TRIM32 (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TRIM32 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-49265 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TRIM32 (N-12) is recommended for detection of TRIM32 of mouse, rat and 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).

Suitable for use as control antibody for TRIM32 siRNA (h): sc-61714, TRIM32 siRNA (m): sc-61715, TRIM32 shRNA Plasmid (h): sc-61714-SH, TRIM32 shRNA Plasmid (m): sc-61715-SH, TRIM32 shRNA (h) Lentiviral Particles: sc-61714-V and TRIM32 shRNA (m) Lentiviral Particles: sc-61715-V.

Molecular Weight of TRIM32: 72 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.

SELECT PRODUCT CITATIONS

1. Kudryashova, E., et al. 2009. Deficiency of the E3 ubiquitin ligase TRIM32 in mice leads to a myopathy with a neurogenic component. Hum. Mol. Genet. 18: 1353-1367.

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.