SANTA CRUZ BIOTECHNOLOGY, INC.

TRIM37 (B-11): sc-514828

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

TRIM37, also designated KIAA0898, is a protein that localizes to peroxisomes and contains a tripartite motif (TRIM) and a tumor necrosis factor-receptor highly conserved between human and mouse. TRIM37 is expressed at a low level in the liver, ovary, heart, lung, skeletal muscle, and kidney, while it is highly expressed in the testis and brain, where it may act as an E3 ubiquitin ligase. Mutations in the TRIM37 gene result in Mulibrey nanism, an autosomal recessive prenatal-onset growth disorder that causes characteristic dysmorphic craniofacial features, heart disease, cardiopathy, failure of sexual maturation, and hepatomegaly.

REFERENCES

1. Hodgkiss, R.J., et al. 1992. Bioreductive fluorescent markers for hypoxic cells: a study of 2-nitroimidazoles with 1-substituents containing fluorescent, bridgehead-nitrogen, bicyclic systems. J. Med. Chem. 35: 1920-1926.
2. Avela, K., et al. 2000. Gene encoding a new RING-B-box-coiled-coil protein is mutated in Mulibrey nanism. Nat. Genet. 25: 298-301.
3. Kallijärvi, J., et al. 2002. The TRIM37 gene encodes a peroxisomal RING-B-box-coiled-coil protein: classification of Mulibrey nanism as a new peroxisomal disorder. Am. J. Hum. Genet. 70: 1215-1228.
4. Jagiello, P., et al. 2003. A novel splice site mutation in the TRIM37 gene causes Mulibrey nanism in a Turkish family with phenotypic heterogeneity. Hum. Mutat. 21: 630-635.
5. Hämäläinen, R.H., et al. 2004. Novel mutations in the TRIM37 gene in Mulibrey nanism. Hum. Mutat. 23: 522.
6. Karlberg, N., et al. 2004. Mulibrey nanism: clinical features and diagnostic criteria. J. Med. Genet. 41: 92-98.
7. Karlberg, N., et al. 2005. Insulin resistance syndrome in subjects with mutated RING finger protein TRIM37. Diabetes 54: 3577-3581.
8. Hämäläinen, R.H., et al. 2006. Characterisation of the Mulibrey nanism-initiation, promoter region and alternative splicing. Gene 366: 180-188.
9. Kallijärvi, J., et al. 2006. Tissue expression of the Mulibrey nanism-associated TRIM37 protein in embryonic and adult mouse tissues. Histochem. Cell Biol. 126: 325-334.

CHROMOSOMAL LOCATION

Genetic locus: TRIM37 (human) mapping to 17q22; Trim37 (mouse) mapping to 11 C.

SOURCE

TRIM37 (B-11) is a mouse monoclonal antibody raised against amino acids 152-451 mapping within an internal region of TRIM37 of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

TRIM37 (B-11) is recommended for detection of TRIM37 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for TRIM37 siRNA (h): sc-61716, TRIM37 siRNA (m): sc-61717, TRIM37 shRNA Plasmid (h): sc-61716-SH, TRIM37 shRNA Plasmid (m): sc-61717-SH, TRIM37 shRNA (h) Lentiviral Particles: sc-61716-V and TRIM37 shRNA (m) Lentiviral Particles: sc-61717-V.

Molecular Weight (predicted) of TRIM37: 108/89/104 kDa.

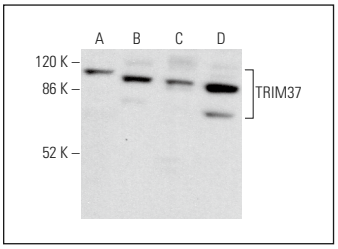
Molecular Weight (observed) of TRIM37: 130/85 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, A-431 whole cell lysate: sc-2201 or Hep G2 cell lysate: sc-2227.

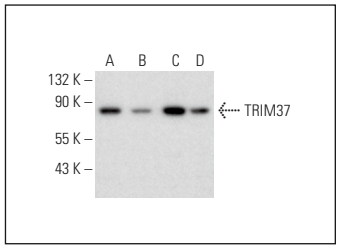
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 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 m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



TRIM37 (B-11): sc-514828. Western blot analysis of TRIM37 expression in Hep G2 (**A**), KNRK (**B**), PC-12 (**C**) and 3T3-L1 (**D**) whole cell lysates.



TRIM37 (B-11): sc-514828. Western blot analysis of TRIM37 expression in HeLa (**A**), RT-4 (**B**), A-431 (**C**) and Hep G2 (**D**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Andersson-Rolf, A., et al. 2017. One-step generation of conditional and reversible gene knockouts. Nat. Methods 14: 287-289.

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.