SANTA CRUZ BIOTECHNOLOGY, INC.

TRIM37 (C-6): sc-515044

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 associated factor (TRAF) domain. The protein and gene forms of TRIM37 are 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.

CHROMOSOMAL LOCATION

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

SOURCE

TRIM37 (C-6) 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_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TRIM37 (C-6) is available conjugated to agarose (sc-515044 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP; to HRP (sc-515044 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-515044 PE), fluorescein (sc-515044 FITC), Alexa Fluor® 488 (sc-515044 AF488), Alexa Fluor® 546 (sc-515044 AF546), Alexa Fluor® 594 (sc-515044 AF594) or Alexa Fluor® 647 (sc-515044 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-515044 AF680) or Alexa Fluor® 790 (sc-515044 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

APPLICATIONS

TRIM37 (C-6) 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.

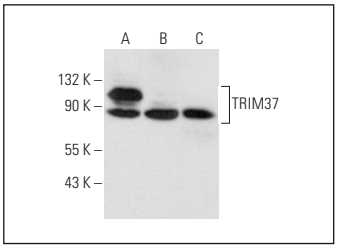
Molecular Weight (observed) of TRIM37: 130/85 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227, HeLa whole cell lysate: sc-2200 or Raji whole cell lysate: sc-364236.

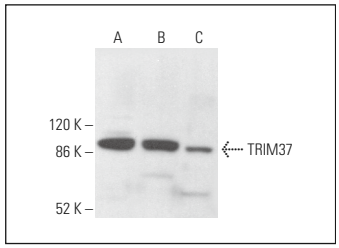
RECOMMENDED SUPPORT REAGENTS

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 (C-6): sc-515044. Western blot analysis of TRIM37 expression in Raji (**A**), HeLa (**B**) and Hep G2 (**C**) whole cell lysates.



TRIM37 (C-6): sc-515044. Western blot analysis of TRIM37 expression in HeLa (**A**), Caki-1 (**B**) and BYDP (**C**) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Wang, W., et al. 2017. TRIM37, a novel E3 ligase for PEX5-mediated peroxisomal matrix protein import. J. Cell Biol. 216: 2843-2858.
2. Wang, W., et al. 2018. TRIM37 deficiency induces autophagy through deregulating the MTORC1-TFEB axis. Autophagy 14: 1574-1585.
3. Brigant, B., et al. 2020. TRIM37 is highly expressed during mitosis in CHON-002 chondrocytes cell line and is regulated by miR-223. Bone 137: 115393.
4. Brigant, B., et al. 2024. A proteomic study of the downregulation of TRIM37 on chondrocytes: implications for the MULIBREY syndrome. Bone 187: 117205.

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.

PROTOCOLS

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