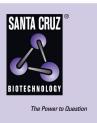
SANTA CRUZ BIOTECHNOLOGY, INC.

Tub (H-145): sc-50370



BACKGROUND

In contrast to the rapid early-onset weight gain seen in ob/ob mice, mutations in the Tub gene lead to obesity gradually and strongly resemble late-onset obesity as seen in the human population. In addition to excessive deposition of adipose tissue, mice with the Tub phenotype also suffer retinal degeneration and neurosensory hearing loss. The tripartite character of Tubby phenotype is strikingly similar to human obesity syndromes such as Alström and Bardet-Biedl. A candidate for the Tub gene has been described. A $G \rightarrow T$ transversion in this candidate gene eliminates a donor splice site in the 3' coding region resulting in a larger transcript containing an unspliced intron. A second prematurely truncated mRNA transcript with the unspliced intron was found to be expressed in the brains of Tubby mice at a 2-3 fold higher rate as compared to B6 mice. It has been postulated that the phenotypic features of Tubby mice can be attributed to cellular apoptosis triggered by the expression of a mutated Tub gene.

CHROMOSOMAL LOCATION

Genetic locus: TUB (human) mapping to 11p15.4; Tub (mouse) mapping to 7 E3.

SOURCE

Tub (H-145) is a rabbit polyclonal antibody raised against amino acids 47-191 mapping near the N-terminus of Tub of human origin.

PRODUCT

Each vial contains 200 μg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Tub (H-145) is recommended for detection of Tub of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

Tub (H-145) is also recommended for detection of Tub in additional species, including equine, canine and bovine.

Suitable for use as control antibody for Tub siRNA (h): sc-44176, Tub siRNA (m): sc-60073, Tub shRNA Plasmid (h): sc-44176-SH, Tub shRNA Plasmid (m): sc-60073-SH, Tub shRNA (h) Lentiviral Particles: sc-44176-V and Tub shRNA (m) Lentiviral Particles: sc-60073-V.

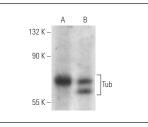
Molecular Weight of Tub: 60 kDa.

Positive Controls: mouse uterus extract: sc-364254 or mouse cerebellum extract: sc-2403.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

DATA



Tub (H-145): sc-50370. Western blot analysis of Tub expression in mouse uterus (A) and mouse cerebellum (B) tissue extracts.

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.

MONOS Satisfation Guaranteed

Try **Tub (40): sc-136112**, our highly recommended monoclonal alternative to Tub (H-145).