

Tub (T-19): sc-1960

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→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 11p15.5; *Tub* (mouse) mapping to 7 E3.

SOURCE

Tub (T-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of *Tub* of mouse 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-1960 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

Tub (T-19) 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 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).

Tub (T-19) is also recommended for detection of *Tub* in additional species, including bovine and porcine.

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.

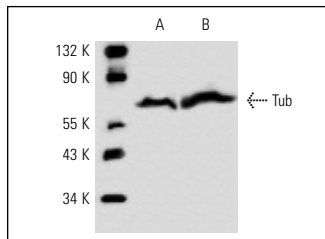
Molecular Weight of *Tub*: 60 kDa.

Positive Controls: mouse brain extract: sc-2253 or rat brain extract: sc-2392.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



Tub (T-19): sc-1960. Western blot analysis of *Tub* expression in rat brain (A) and mouse brain (B) extracts.

SELECT PRODUCT CITATIONS

- Santagata, S., et al. 2001. G-protein signaling through *tubby* proteins. *Science* 292: 2041-2050.
- Giannaccini, G., et al. 2007. *Tubby* protein in human lymphocytes from normal weight and obese subjects. *Clin. Biochem.* 40: 806-809.

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
Satisfaction
Guaranteed

Try **Tub (40): sc-136112**, our highly recommended monoclonal alternative to Tub (T-19).