

Tub (M-19): sc-1959

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 (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-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-1959 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

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

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.

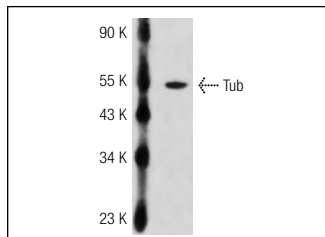
Molecular Weight of *Tub*: 60 kDa.

Positive Controls: TK-1 whole cell lysate, 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 goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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-mouse IgG-FITC: sc-2010 (dilution range: 1:100-1:400) or goat anti-mouse IgG-TR: sc-2781 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Tub (M-19): sc-1959. Western blot analysis of *Tub* expression in TK-1 whole cell lysate.

STORAGE

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

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 (M-19).