

TULP3 (H-10): sc-393411

BACKGROUND

Mutations in the mouse *Tub* gene gradually lead to obesity, strongly resembling the late-onset obesity observed 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. A human homolog of the *Tub* gene has been identified, as have three related proteins, called Tubby-like protein 1 (TULP1), TULP2 and TULP3. When compared to TULP1 and TULP2, TULP3 has a wider tissue expression and is phylogenetically more similar to *Tub* than either TULP1 or TULP2. TULP1, expressed specifically in the retina, maps to the chromosomal region known to be involved in retinitis pigmentosa, while TULP2 maps within the minimal interval for the rod-cone dystrophy. TULP3 maps to human chromosome 12p13.33, and shares 69% homology to mouse TULP3. Human RNA from testis, ovary, thyroid and spinal cord contain highly detectable levels of TULP3 transcripts. In the retina, TULP3 is expressed specifically in the inner nuclear layer and ganglion cell layer. TULP1, TULP2 and TULP3 may comprise a unique family of bipartite transcription factors.

REFERENCES

- Ohlemiller, K.K., et al. 1995. Cochlear and retinal degeneration in the tubby mouse. *Neuroreport* 6: 845-849.
- Noben-Trauth, K., et al. 1996. A candidate gene for the mouse mutation tubby. *Nature* 380: 534-538.
- North, M.A., et al. 1997. Molecular characterization of TUB, TULP1, and TULP2, members of the novel tubby gene family and their possible relation to ocular diseases. *Proc. Natl. Acad. Sci. USA* 94: 3128-3133.
- Gu, S., et al. 1998. Tubby-like protein-1 mutations in autosomal recessive retinitis pigmentosa. *Lancet* 351: 1103-1104.

CHROMOSOMAL LOCATION

Genetic locus: TULP3 (human) mapping to 12p13.33; Tulp3 (mouse) mapping to 6 F3.

SOURCE

TULP3 (H-10) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of TULP3 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

TULP3 (H-10) is available conjugated to agarose (sc-393411 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-393411 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-393411 PE), fluorescein (sc-393411 FITC), Alexa Fluor[®] 488 (sc-393411 AF488), Alexa Fluor[®] 546 (sc-393411 AF546), Alexa Fluor[®] 594 (sc-393411 AF594) or Alexa Fluor[®] 647 (sc-393411 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor[®] 680 (sc-393411 AF680) or Alexa Fluor[®] 790 (sc-393411 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

TULP3 (H-10) is recommended for detection of TULP3 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).

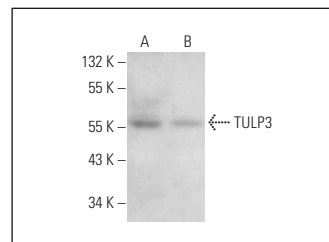
Suitable for use as control antibody for TULP3 siRNA (h): sc-77355, TULP3 siRNA (m): sc-77393, TULP3 shRNA Plasmid (h): sc-77355-SH, TULP3 shRNA Plasmid (m): sc-77393-SH, TULP3 shRNA (h) Lentiviral Particles: sc-77355-V and TULP3 shRNA (m) Lentiviral Particles: sc-77393-V.

Positive Controls: ES-2 cell lysate: sc-24674, ACHN whole cell lysate: sc-364365 or NCI-H292 whole cell lysate: sc-364179.

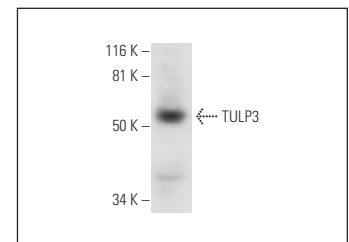
RECOMMENDED SUPPORT REAGENTS

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



TULP3 (H-10): sc-393411. Western blot analysis of TULP3 expression in ACHN (A) and NCI-H292 (B) whole cell lysates.



TULP3 (H-10): sc-393411. Western blot analysis of TULP3 expression in ES-2 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.

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.