

TULP3 Rabbit pAb

TULP3 Rabbit pAb Catalog # AP54565

Product Information

Application WB Primary Accession 075386

Reactivity Rat, Chicken, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 49642
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human TULP3

Epitope Specificity 251-350/442

Isotype IgG

Purity affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION

0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Nucleus. Cell membrane. Cell projection, cilium (By similarity). Cytoplasm (By similarity). Secreted (By similarity). Note=Does not have a cleavable signal peptide and is secreted by a non-conventional pathway (By similarity). Translocates from the plasma membrane to the nucleus upon activation of guanine nucleotide-binding protein G(q) subunit alpha.

SIMILARITY Belongs to the TUB family.

Important NoteThis product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions Mutations

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, 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.

Additional Information

Gene ID 7289

Other Names Tubby-related protein 3, Tubby-like protein 3, TULP3 (<u>HGNC:12425</u>), TUBL3

Target/Specificity Expressed at high levels in testis, ovaries, thyroid, and spinal chord.

Dilution WB=1:500-2000

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name TULP3 (HGNC:12425)

Synonyms TUBL3

Function Negative regulator of the Shh signaling transduction pathway: recruited to

primary cilia via association with the IFT complex A (IFT- A) and is required for recruitment of G protein-coupled receptor GPR161 to cilia, a promoter of PKA-dependent basal repression machinery in Shh signaling. Binds to phosphorylated inositide (phosphoinositide) lipids. Both IFT-A- and phosphoinositide-binding properties are required to regulate ciliary G protein-coupled receptor trafficking. During adipogenesis, regulates ciliary

trafficking of FFAR4 in preadipocytes.

Cellular Location Nucleus. Cell membrane. Cell projection, cilium. Cytoplasm. Secreted.

Note=Does not have a cleavable signal peptide and is secreted by a non-conventional pathway (By similarity). Translocates from the plasma membrane to the nucleus upon activation of guanine nucleotide-binding

protein G(q) subunit alpha

Tissue Location Expressed at high levels in testis, ovaries, thyroid, and spinal cord.

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, 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.

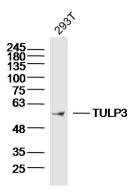
Images

Sample:293T Cell (human) Lysate at 40 ug Primary: Anti-TULP3(AP54565)at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000

dilution

Predicted band size: 50 kD Observed band size: 50 kD



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.