

Tctex2 β (G-14): sc-165658

BACKGROUND

Tctex2 β , also known as TCTEX1D4 (Tctex1 domain-containing protein 4), is a 221 amino acid ubiquitously expressed protein that belongs to the dynein light chain Tctex-type family. While it interacts with endoglin, a component of the transforming growth factor beta (TGF β) receptor complex, Tctex2 β also interacts with TGF β RII and TGF β RIII, two members of the TGF β receptor subfamily. The gene that encodes Tctex2 β consists of approximately 1,378 bases and maps to human chromosome 1p34.1. With roughly 3,000 genes that span about 260 million base pairs, chromosome 1 makes up approximately 8% of the human genome. There are also a large number of diseases associated with chromosome 1, notably, the rare aging disease Hutchinson-Gilford progeria which is associated with the LMNA gene that encodes lamin A. The MUTYH gene is located on chromosome 1 and is partially responsible for familial adenomatous polyposis. Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome are also associated with chromosome 1.

REFERENCES

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3. Eudy, J.D., et al. 1998. Mutation of a gene encoding a protein with extracellular matrix motifs in Usher syndrome type IIa. *Science* 280: 1753-1757.
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5. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. *Mol. Genet. Metab.* 73: 313-321.
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7. Meng, Q., et al. 2006. Identification of Tctex2 β , a novel dynein light chain family member that interacts with different transforming growth factor- β receptors. *J. Biol. Chem.* 281: 37069-37080.
8. Betarbet, R., et al. 2008. Fas-associated factor 1 and Parkinson's disease. *Neurobiol. Dis.* 31: 309-315.
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CHROMOSOMAL LOCATION

Genetic locus: TCTEX1D4 (human) mapping to 1p34.1.

SOURCE

Tctex2 β (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Tctex2 β of human origin.

RESEARCH USE

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

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-165658 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Tctex2 β (G-14) is recommended for detection of Tctex2 β of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 Tctex2 β siRNA (h): sc-88822, Tctex2 β shRNA Plasmid (h): sc-88822-SH and Tctex2 β shRNA (h) Lentiviral Particles: sc-88822-V.

Molecular Weight of Tctex2 β : 23 kDa.

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) 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.

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.