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Tctex2 β siRNA (m): sc-155971

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 β (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

1. Dobbie, Z., et al. 1997. Identification of a modifier gene locus on chromosome 1p35-36 in familial adenomatous polyposis. *Hum. Genet.* 99: 653-657.
2. Eudy, J.D., et al. 1998. Isolation of a gene encoding a novel member of the nuclear receptor superfamily from the critical region of Usher syndrome type IIa at 1q41. *Genomics* 50: 382-384.
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.
4. Bowling, E.L., et al. 2000. The Stickler syndrome: case reports and literature review. *Optometry* 71: 177-182.
5. Tayebi, N., et al. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. *Mol. Genet. Metab.* 73: 313-321.
6. Plasilova, M., et al. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. *Eur. J. Hum. Genet.* 12: 365-371.
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.
9. Yokoi, T., et al. 2009. Analysis of the vitreous membrane in a case of type 1 Stickler syndrome. *Graefes Arch. Clin. Exp. Ophthalmol.* 247: 715-718.

CHROMOSOMAL LOCATION

Genetic locus: Tctex1d4 (mouse) mapping to 4 D1.

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.

PRODUCT

Tctex2 β siRNA (m) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Tctex2 β shRNA Plasmid (m): sc-155971-SH and Tctex2 β shRNA (m) Lentiviral Particles: sc-155971-V as alternate gene silencing products.

For independent verification of Tctex2 β (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-155971A, sc-155971B and sc-155971C.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Tctex2 β siRNA (m) is recommended for the inhibition of Tctex2 β expression in mouse cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 μ M in 66 μ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Tctex2 β gene expression knockdown using RT-PCR Primer: Tctex2 β (m)-PR: sc-155971-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.