

Tektin 3 siRNA (h): sc-93623

BACKGROUND

The Tektin proteins comprise a family of insoluble, α -helical, filament-forming peptides that interact with Tubulins and, via this interaction, form flagellar and ciliary microtubules. Tektin 3, is also known as testicular microtubules-related protein or TEK3, is a 490 amino acid protein and is a member of the Tektin family. Similar to other members of the Tektin family, Tektin 3 functions as a structural component of microtubules, specifically forming polymers in the walls of microtubules and stabilizing overall microtubule structure. Tektin 3 is encoded by a gene located on human chromosome 17, which comprises over 2.5% of the human genome and encodes over 1,200 genes.

REFERENCES

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4. Iguchi, N., et al. 2002. Cloning and characterization of the human tektin-t gene. *Mol. Hum. Reprod.* 8: 525-530.
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7. Setter, P.W., et al. 2006. Tektin interactions and a model for molecular functions. *Exp. Cell Res.* 312: 2880-2896.
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CHROMOSOMAL LOCATION

Genetic locus: TEK3 (human) mapping to 17p12.

PRODUCT

Tektin 3 siRNA (h) 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 Tektin 3 shRNA Plasmid (h): sc-93623-SH and Tektin 3 shRNA (h) Lentiviral Particles: sc-93623-V as alternate gene silencing products.

For independent verification of Tektin 3 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-93623A, sc-93623B and sc-93623C.

RESEARCH USE

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

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

Tektin 3 siRNA (h) is recommended for the inhibition of Tektin 3 expression in human 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 Tektin 3 gene expression knockdown using RT-PCR Primer: Tektin 3 (h)-PR: sc-93623-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.