

▶ TEX264 siRNA (h): sc-78167

BACKGROUND

TEX264 (testis expressed 264), also known as SIG11 or ZSIG11, is a 313 amino acid secreted protein expressed in testis. The gene encoding TEX264 is located on chromosome 3 and is upregulated in Sporadic Parkinson's disease (PD), a neurodegenerative disorder characterized by rigidity, resting tremor and bradykinesia. Typically, the genes that are upregulated in PD play a role in processes involving the cell cycle, transcription, cell adhesion, extracellular matrix components, protein metabolism, inflammation/cell stress and protein modification. This suggests that TEX264 may participate in one of these biological processes.

REFERENCES

1. Tu, C.J., et al. 2005. High-sensitivity analysis of human plasma proteome by immobilized isoelectric focusing fractionation coupled to mass spectrometry identification. *J. Proteome Res.* 4: 1265-1273.
2. Titus, T.A., et al. 2006. The Fanconi anemia gene network is conserved from zebrafish to human. *Gene* 371: 211-223.
3. Mistry, R., et al. 2007. Gene-expression patterns in whole blood identify subjects at risk for recurrent tuberculosis. *J. Infect. Dis.* 195: 357-365.
4. Wang, L., et al. 2008. The chaperone activity of heat shock protein 90 is critical for maintaining the stability of leucine-rich repeat kinase 2. *J. Neurosci.* 28: 3384-3391.

CHROMOSOMAL LOCATION

Genetic locus: TEX264 (human) mapping to 3p21.2.

PRODUCT

TEX264 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 TEX264 shRNA Plasmid (h): sc-78167-SH and TEX264 shRNA (h) Lentiviral Particles: sc-78167-V as alternate gene silencing products.

For independent verification of TEX264 (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-78167A, sc-78167B and sc-78167C.

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.

PROTOCOLS

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

APPLICATIONS

TEX264 siRNA (h) is recommended for the inhibition of TEX264 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.

GENE EXPRESSION MONITORING

TEX264 (137.1): sc-100944 is recommended as a control antibody for monitoring of TEX264 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor TEX264 gene expression knockdown using RT-PCR Primer: TEX264 (h)-PR: sc-78167-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

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