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SANTA CRUZ BIOTECHNOLOGY, INC.

transgelin-3 siRNA (m): sc-154581

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Transgelin (also designated SM22α) is expressed abundantly in smooth muscle cells. Transgelin-2 (also known as SM22α homolog) is a homolog of transgelin and is also expressed in smooth muscle cells and by peritoneal B-1 cells. Unlike the other two transgelin proteins, transgelin-3 (also designated TAGLN2, NP22 (neuronal protein 22) or NP25) is predominantly expressed in brain. Transgelin-3 contains a putative Actin-binding domain, two EF-hand motifs, two potential phosphorylation sites and a calponin-homology (CH) domain. Transgelin-3 shares homology with transgelin and Calponin, two cytoskeleton-interacting proteins. Belonging to the calponin family, transgelin-3 colocalizes with Actin and Tubulin, suggesting a possible role for transgelin-3 in neuronal plasticity or as a signaling protein. Due to a varied expression pattern, transgelin-3 may play different roles in the developing and adult brain. Expression of transgelin-3 is upregulated in regions of the human alcoholic brain.

REFERENCES

1. Ren, W.Z., Ng, G.Y., Wang, R.X., Wu, P.H., O'Dowd, B.F., Osmond, D.H., George, S.R. and Liew, C.C. 1994. The identification of NP25: a novel protein that is differentially expressed by neuronal subpopulations. Brain Res. Mol. Brain Res. 22: 173-185.
2. Fan, L., Jaquet, V., Dodd, P.R., Chen, W. and Wilce, P.A. 2001. Molecular cloning and characterization of hNP22: a gene up-regulated in human alcoholic brain. J. Neurochem. 76: 1275-1281.
3. Depaz, I., Ito, M., Matsumoto, I., Niwa, S., Kroon, P. and Wilce, P.A. 2003. Expression of hNP22 is altered in the frontal cortex and hippocampus of the alcoholic human brain. Alcohol. Clin. Exp. Res. 27: 1481-1488.
4. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607953. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Depaz, I.M., de Las Heras, R., Kroon, P.A. and Wilce, P.A. 2005. Changes in neuronal protein 22 expression and cytoskeletal association in the alcohol-dependent and withdrawn rat brain. J. Neurosci. Res. 81: 253-260.
6. Depaz, I.M. and Wilce, P.A. 2006. The novel cytoskeleton-associated protein neuronal protein 22: elevated expression in the developing rat brain. Brain Res. 1081: 59-64.

CHROMOSOMAL LOCATION

Genetic locus: Tagln3 (mouse) mapping to 16 B5.

PRODUCT

transgelin-3 siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see transgelin-3 shRNA Plasmid (m): sc-154581-SH and transgelin-3 shRNA (m) Lentiviral Particles: sc-154581-V as alternate gene silencing products.

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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

transgelin-3 siRNA (m) is recommended for the inhibition of transgelin-3 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 µM in 66 µl. 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

transgelin-3 (438.1): sc-100960 is recommended as a control antibody for monitoring of transgelin-3 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-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ 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 transgelin-3 gene expression knockdown using RT-PCR Primer: transgelin-3 (m)-PR: sc-154581-PR (20 µl). 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.