SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic

SANTA CRUZ BIOTECHNOLOGY, INC.

BF-1 siRNA (h): sc-43631

BACKGROUND

The winged helix transcriptional repressor (WH) BF-1 gene encodes brain factor 1 (BF-1), also known as FOXG1, and is essential for the proliferation of progenitor cells in the cerebral cortex and influences regional patterning in the mammalian telencephalon. WH proteins are a family of putative transcriptional regulators with diverse roles in development, and are characterized by a highly conserved DNA binding structure, the WH domain. BF-1 plays a critical role in the development of the cerebral hemispheres of the brain and targeted disruption of the gene leads to severe defects in the development of telencephalic structures, such as the cerebral cortex and basal ganglia. The loss of BF-1 results in an accelerated rate of neuronal differentiation and the shortening of the neurogenetic period in the embryonic cerebral cortex. BF-1 is expressed by E8.5 in telencephalic progenitors. It may also regulate the response of cerebral cortical progenitors to environmental cues.

REFERENCES

1. Xuan, S., Baptista, C., Balas, G., Tao, W., Soares, V. and Lai, E. 1995. Winged helix transcription factor BF-1 is essential for the development of the cerebral hemispheres. Neuron 14: 1141-1152.
2. Shimamura, K., Hartigan, D., Martinez, S., Puelles, L. and Rubenstein, J. 1995. Longitudinal organization of the anterior neural plate and neural tube. Development 121: 3923-3933.
3. Kaufmann, E. and Knochel, W. 1996. Five years on the wings of fork head. Mech. Dev. 57: 3-20.
4. Hatini, V., Ye, X., Balas, G. and Lai, E. 1999. Dynamics of placodal lineage development revealed by targeted transgene expression. Dev. Dyn. 215: 332-343.
5. Kaestner, K., Knöchel, W. and Martínez, D. 2000. Unified nomenclature for the winged helix/forkhead transcription factors. Genes Dev. 14: 142-146.
6. Dou, C., Lee, J., Liu, B., Liu, F., Massague, J., Xuan, S. and Lai, E. 2000. BF-1 interferes with transforming growth factor β signaling by associating with Smad partners. Mol. Cell. Biol. 20: 6201-6211.

CHROMOSOMAL LOCATION

Genetic locus: FOXG1 (human) mapping to 14q12.

PRODUCT

BF-1 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see BF-1 shRNA Plasmid (h): sc-43631-SH and BF-1 shRNA (h) Lentiviral Particles: sc-43631-V as alternate gene silencing products.

For independent verification of BF-1 (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-43631A, sc-43631B and sc-43631C.

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

BF-1 siRNA (h) is recommended for the inhibition of BF-1 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 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor BF-1 gene expression knockdown using RT-PCR Primer: BF-1 (h)-PR: sc-43631-PR (20 µl). 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.