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.

HSPB3 siRNA (m): sc-146102

BACKGROUND

The heat shock proteins (HSPs) comprise a group of highly conserved, abundantly expressed proteins with diverse functions, including the assembly and sequestering of multi-protein complexes, transportation of nascent polypeptide chains across cellular membranes and regulation of protein folding. HSPB3 (heat shock 27kDa protein 3), also known as HSPL27, is a 150 amino acid member of the shock protein family and is thought to function as an inhibitor of Actin polymerization, possibly playing a role in muscle maintenance and differentiation. The gene encoding HSPB3 maps to human chromosome 5, which contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm or of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome.

REFERENCES

1. Lam, W.Y., Wing Tsui, S.K., Law, P.T., Luk, S.C., Fung, K.P., Lee, C.Y. and Waye, M.M. 1996. Isolation and characterization of a human heart cDNA encoding a new member of the small heat shock protein family—HSPL27. Biochim. Biophys. Acta 1314: 120-124.
2. Boelens, W.C., Van Boekel, M.A. and De Jong, W.W. 1998. HSPB3, the most deviating of the six known human small heat shock proteins. Biochim. Biophys. Acta 1388: 513-516.
3. Sugiyama, Y., Suzuki, A., Kishikawa, M., Akutsu, R., Hirose, T., Waye, M.M., Tsui, S.K., Yoshida, S. and Ohno, S. 2000. Muscle develops a specific form of small heat shock protein complex composed of MKBP/HSPB2 and HSPB3 during myogenic differentiation. J. Biol. Chem. 275: 1095-1104.
4. Verschuure, P., Croes, Y., van den IJssel, P.R., Quinlan, R.A., de Jong, W.W. and Boelens, W.C. 2002. Translocation of small heat shock proteins to the Actin cytoskeleton upon proteasomal inhibition. J. Mol. Cell. Cardiol. 34: 117-128.
5. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604624. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
6. Kappé, G., Franck, E., Verschuure, P., Boelens, W.C., Leunissen, J.A. and de Jong, W.W. 2003. The human genome encodes 10 α-crystallin-related small heat shock proteins: HSPB1-10. Cell Stress Chaperones 8: 53-61.
7. Boros, S., Kamps, B., Wunderink, L., de Bruijn, W., de Jong, W.W. and Boelens, W.C. 2004. Transglutaminase catalyzes differential crosslinking of small heat shock proteins and Amyloid-β. FEBS Lett. 576: 57-62.

CHROMOSOMAL LOCATION

Genetic locus: Hspb3 (mouse) mapping to 13 D2.2.

RESEARCH USE

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

PROTOCOLS

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

PRODUCT

HSPB3 siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3 nmol of lyophilized siRNA, sufficient for a 10 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see HSPB3 shRNA Plasmid (m): sc-146102-SH and HSPB3 shRNA (m) Lentiviral Particles: sc-146102-V as alternate gene silencing products.

For independent verification of HSPB3 (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-146102A and sc-146102B.

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

HSPB3 siRNA (m) is recommended for the inhibition of HSPB3 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.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor HSPB3 gene expression knockdown using RT-PCR Primer: HSPB3 (m)-PR: sc-146102-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.