



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](https://www.linkedin.com/company/szaboscandic) 

hornerin siRNA (m): sc-146070

BACKGROUND

Hornerin, also known as HRNR, S100A16 or S100a18, is a 2,850 amino acid protein that contains two EF-hand domains and belongs to both the S-100 and S100-fused protein families. Localizing to cytoplasmic and keratohyalin granules, hornerin has been found in healthy epidermis, the outer root sheath of scalp hair follicles, and in psoriatic and regenerating skin following wounding. Hornerin is suggested to play a role in cornification and is encoded by a gene that maps to human chromosome 1q21.3. Human chromosome 1 spans 260 million base pairs, contains over 3,000 genes, comprises nearly 8% of the human genome and houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease, schizophrenia and Usher syndrome.

REFERENCES

1. Bowling, E.L., Brown, M.D. and Trundle, T.V. 2000. The Stickler syndrome: case reports and literature review. *Optometry* 71: 177-182.
2. Makino, T., Takaishi, M., Morohashi, M. and Huh, N.H. 2001. Hornerin, a novel profilaggrin-like protein and differentiation-specific marker isolated from mouse skin. *J. Biol. Chem.* 276: 47445-47452.
3. Tayebi, N., Callahan, M., Madike, V., Stubblefield, B.K., Orvisky, E., Krasnewich, D., Fillano, J.J. and Sidransky, E. 2001. Gaucher disease and parkinsonism: a phenotypic and genotypic characterization. *Mol. Genet. Metab.* 73: 313-321.
4. Plasilova, M., Russell, A.M., Wanner, A., Wolf, A., Dobbie, Z., Müller, H.J. and Heinimann, K. 2004. Exclusion of an extracolonic disease modifier locus on chromosome 1p33-36 in a large Swiss familial adenomatous polyposis kindred. *Eur. J. Hum. Genet.* 12: 365-371.
5. Takaishi, M., Makino, T., Morohashi, M. and Huh, N.H. 2005. Identification of human hornerin and its expression in regenerating and psoriatic skin. *J. Biol. Chem.* 280: 4696-4703.
6. Yurov, Y.B., Iourov, I.Y., Vorsanova, S.G., Demidova, I.A., Kravetz, V.S., Beresheva, A.K., Kolotii, A.D., Monakhov, V.V., Uranova, N.A., Vostrikov, V.M., Soloviev, I.V. and Liehr, T. 2008. The schizophrenia brain exhibits low-level aneuploidy involving chromosome 1. *Schizophr. Res.* 98: 139-147.
7. Stemmler, S., Nothnagel, M., Parwez, Q., Petrasch-Parwez, E., Epplen, J.T. and Hoffjan, S. 2009. Variation in genes of the epidermal differentiation complex in German atopic dermatitis patients. *Int. J. Immunogenet.* 36: 217-222.
8. Wu, Z., Meyer-Hoffert, U., Reithmayer, K., Paus, R., Hansmann, B., He, Y., Bartels, J., Gläser, R., Harder, J. and Schröder, J.M. 2009. Highly complex peptide aggregates of the S100 fused-type protein hornerin are present in human skin. *J. Invest. Dermatol.* 129: 1446-1458.

CHROMOSOMAL LOCATION

Genetic locus: *Hnrn* (mouse) mapping to 3 F2.1.

RESEARCH USE

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

PRODUCT

hornerin siRNA (m) 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 hornerin shRNA Plasmid (m): sc-146070-SH and hornerin shRNA (m) Lentiviral Particles: sc-146070-V as alternate gene silencing products.

For independent verification of hornerin (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-146070A, sc-146070B and sc-146070C.

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

hornerin siRNA (m) is recommended for the inhibition of hornerin 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 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 hornerin gene expression knockdown using RT-PCR Primer: hornerin (m)-PR: sc-146070-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.