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.

zero siRNA (h): sc-44194

BACKGROUND

Zero, also known as myelin protein zero (MPZ) is a Type 1 integral membrane glycoprotein that mediates adhesion of spiraling wraps of the myelin sheath in order to ensure stable synaptic transmission. Zero protein encompasses approximately 50% of total protein in the sheath scaffolding in contribution to structural integrity of peripheral myelin. Zero guides the compact myelin wrapping process through glycine zipper packing interface-dependent dimer and tetramer formation. Mutations (e.g. G134R) can abrogate multimer formation, cause demyelinating neuropathies, and are known to contribute to conditions that include Charcot-Marie-Tooth disease. Zero cytoplasmic domain undergoes serine and tyrosine phosphorylation, which appears to be prevalent during peak nerve myelination. Zero transcript is moderate in brain, abundant in thymus and most abundant in white matter of the CNS.

REFERENCES

1. Kim, H.J., Jung, C.G., Jensen, M.A., Dukala, D. and Soliven, B. 2008. Targeting of myelin protein zero in a spontaneous autoimmune polyneuropathy. J. Immunol. 181: 8753-8760.
2. Lemke, G. 2008. Isolation and analysis of the gene encoding peripheral myelin protein zero. Neuron 60: 403.
3. Plotkowski, M.L., Kim, S., Phillips, M.L., Partridge, A.W., Deber, C.M., Bowie, J.U. 2007. Transmembrane domain of myelin protein zero can form dimers: possible implications for myelin construction. Biochemistry 46: 12164-12173.
4. Gaboreanu, A.M., Hrstka, R., Xu, W., Shy, M., Kamholz, J., Lilien, J. and Balsamo, J. 2007. Myelin protein zero/P0 phosphorylation and function require an adaptor protein linking it to RACK1 and PKC α. J. Cell Biol. 177: 707-716.
5. Taguchi, K., Kumanogoh, H., Nakamura, S., Miyata, S. and Maekawa, S. 2007. Myelin protein zero is one of the components of the detergent-resistant membrane microdomain fraction prepared from rat pituitary. J. Mol. Histol. 38: 79-85.
6. Shy, M.E., Jáni, A., Krajewski, K., Grandis, M., Lewis, R.A., Li, J., Shy, R.R., Balsamo, J., Lilien, J., Garbern, J.Y. and Kamholz, J. 2004. Phenotypic clustering in MPZ mutations. Brain 127: 371-384.

CHROMOSOMAL LOCATION

Genetic locus: MPZ (human) mapping to 1q23.3.

PRODUCT

zero 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 zero shRNA Plasmid (h): sc-44194-SH and zero shRNA (h) Lentiviral Particles: sc-44194-V as alternate gene silencing products.

For independent verification of zero (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-44194A, sc-44194B and sc-44194C.

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

zero siRNA (h) is recommended for the inhibition of zero 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 zero gene expression knockdown using RT-PCR Primer: zero (h)-PR: sc-44194-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.

PROTOCOLS

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