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.

Penumbra siRNA (m): sc-152163

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Penumbra, also known as TSPAN33 (tetraspanin 33), PEN or proerythroblast new membrane, is a 283 amino acid multi-pass membrane protein that exhibits growth-suppressive activity and belongs to the tetraspanin (TM4SF) family. A disulfide-linked homodimer, Penumbra contains nine exons and shares 97% sequence identity with its mouse ortholog. Predominantly expressed in erythroblasts, Penumbra plays an important role in normal erythropoiesis and in erythroid progenitor differentiation. Penumbra promotes Notch activity and likely functions during the γ-secretase cleavage step. Penumbra is encoded by a gene that maps to human chromosome 7q32.1, a region strongly linked to cytogenetic abnormalities in myeloid malignancies. A 7q32 deletion is also a characteristic feature of splenic marginal zone lymphoma.

REFERENCES

1. Chen, Z., et al. 2005. The human Penumbra gene is mapped to a region on chromosome 7 frequently deleted in myeloid malignancies. Cancer Genet. Cytogenet. 162: 95-98.
2. Heikens, M.J., et al. 2007. Penumbra encodes a novel tetraspanin that is highly expressed in erythroid progenitors and promotes effective erythropoiesis. Blood 109: 3244-3252
3. Mangin, P.H., et al. 2009. CD9 negatively regulates integrin αIIbβ3 activation and could thus prevent excessive platelet recruitment at sites of vascular injury. J. Thromb. Haemost. 7: 900-902.
4. Huang, S., et al. 2010. The evolution of vertebrate tetraspanins: gene loss, retention, and massive positive selection after whole genome duplications. BMC Evol. Biol. 10: 306.
5. Romanska, H.M., et al. 2010. Tetraspanins in human epithelial malignancies. J. Pathol. 223: 4-14.
6. Dunn, C.D., et al. 2010. A conserved tetraspanin subfamily promotes Notch signaling in *Caenorhabditis elegans* and in human cells. Proc. Natl. Acad. Sci. USA 107: 5907-5912.

CHROMOSOMAL LOCATION

Genetic locus: Tspan33 (mouse) mapping to 6 A3.3.

PRODUCT

Penumbra 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Penumbra shRNA Plasmid (m): sc-152163-SH and Penumbra shRNA (m) Lentiviral Particles: sc-152163-V as alternate gene silencing products.

For independent verification of Penumbra (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-152163A, sc-152163B and sc-152163C.

PROTOCOLS

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

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

Penumbra siRNA (m) is recommended for the inhibition of Penumbra 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 Penumbra gene expression knockdown using RT-PCR Primer: Penumbra (m)-PR: sc-152163-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.