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.

NPB siRNA (m): sc-150047

BACKGROUND

NPB (neuropeptide B), also known as PPL7 (preproprotein L7) or PPNPB (pre-proneuropeptide B), is a 125 amino acid secreted protein that belongs to the neuropeptide B/W family and may be involved in the regulation of feeding, neuroendocrine system, memory, learning and in the afferent pain pathway. While widely expressed in substantia nigra, hypothalamus, hippocampus, spinal cord, placenta, fetal brain and colorectal adenocarcinoma, NPB is expressed at lower levels in testis, uterus and ovary. The gene that encodes NPB consists of about 710 bases and maps to human chromosome 17q25.3. Comprising over 2.5% of the human genome, chromosome 17 consists of about 81 million bases, encodes over 1,200 genes and has the highest gene density in the genome. Chromosome 17 is also enriched in segmental duplications, ranking third in density among the autosomes.

REFERENCES

1. Varley, J.M., Thorncroft, M., McGown, G., Appleby, J., Kelsey, A.M., Tricker, K.J., Evans, D.G. and Birch, J.M. 1997. A detailed study of loss of heterozygosity on chromosome 17 in tumours from Li-Fraumeni patients carrying a mutation to the TP53 gene. Oncogene 14: 865-871.
2. Kersemaekers, A.M., Hermans, J., Fleuren, G.J. and van de Vijver, M.J. 1998. Loss of heterozygosity for defined regions on chromosomes 3, 11 and 17 in carcinomas of the uterine cervix. Br. J. Cancer 77: 192-200.
3. Minamoto, T., Buschmann, T., Habelhah, H., Matusevich, E., Tahara, H., Boerresen-Dale, A.L., Harris, C., Sidransky, D. and Ronai, Z. 2001. Distinct pattern of p53 phosphorylation in human tumors. Oncogene 20: 3341-3347.
4. Fujii, R., Yoshida, H., Fukusumi, S., Habata, Y., Hosoya, M., Kawamata, Y., Yano, T., Hinuma, S., Kitada, C., Asami, T., Mori, M., Fujisawa, Y. and Fujino, M. 2002. Identification of a neuropeptide modified with bromine as an endogenous ligand for GPR7. J. Biol. Chem. 277: 34010-34016.
5. Brezillon, S., Lannoy, V., Franssen, J.D., Le Poul, E., Dupriez, V., Lucchetti, J., Detheux, M. and Parmentier, M. 2003. Identification of natural ligands for the orphan G protein-coupled receptors GPR7 and GPR8. J. Biol. Chem. 278: 776-783.
6. Tanaka, H., Yoshida, T., Miyamoto, N., Motoike, T., Kurosu, H., Shibata, K., Yamanaka, A., Williams, S.C., Richardson, J.A., Tsujino, N., Garry, M.G., Lerner, M.R., King, D.S., O'Dowd, B.F., Sakurai, T. and Yanagisawa, M. 2003. Characterization of a family of endogenous neuropeptide ligands for the G protein-coupled receptors GPR7 and GPR8. Proc. Natl. Acad. Sci. USA 100: 6251-6256.
7. Online Mendelian Inheritance in Man, OMIM™. 2003. Johns Hopkins University, Baltimore, MD. MIM Number: 607996. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
8. Kanesaka, M., Matsuda, M., Hirano, A., Tanaka, K., Kanatani, A. and Tokita, S. 2007. Development of a potent and selective GPR7 (NPBW1) agonist: a systematic structure-activity study of neuropeptide B. J. Pept. Sci. 13: 379-385.
9. Lambert, N.A. 2008. Dissociation of heterotrimeric G proteins in cells. Sci. Signal. 1: re5.

CHROMOSOMAL LOCATION

Genetic locus: Npb (mouse) mapping to 11 E2.

PRODUCT

NPB siRNA (m) is a target-specific 19-25 nt siRNA 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 NPB shRNA Plasmid (m): sc-150047-SH and NPB shRNA (m) Lentiviral Particles: sc-150047-V as alternate gene silencing 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

NPB siRNA (m) is recommended for the inhibition of NPB 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 NPB gene expression knockdown using RT-PCR Primer: NPB (m)-PR: sc-150047-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.