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.

QPCT siRNA (m): sc-152611

BACKGROUND

QPCT (glutaminyl-peptide cyclotransferase) is a 361 amino acid protein that belongs to the glutaminyl-peptide cyclotransferase family. QPCT is responsible for the presence of pyroglutamyl residues in many neuroendocrine peptides. QPCT binds one zinc ion per subunit and has a bias against acidic and tryptophan residues adjacent to the N-terminal glutaminyl residue. The human QPCT gene shares 86% overall sequence identity with the bovine homolog. QPCT contains an N-terminal signal peptide region, several glycosylation and phosphorylation sites and two cysteine residues conserved between the bovine and human enzymes. Existing as two alternatively spliced isoforms, the QPCT gene is conserved in chimpanzee, canine, bocine, mouse, rat, chicken, fruit fly, mosquito, *M. grisea* and *N. crassa*, and maps to human chromosome 2p22.2.

REFERENCES

1. Busby, W.H., et al. 1987. An enzyme(s) that converts glutaminyl-peptides into pyroglutamyl-peptides. Presence in pituitary, brain, adrenal medulla, and lymphocytes. J. Biol. Chem. 262: 8532-8536.
2. Song, I., et al. 1994. Molecular cloning, sequence analysis and expression of human pituitary glutaminyl cyclase. J. Mol. Endocrinol. 13: 77-86.
3. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 607065. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
4. Schilling, S., et al. 2004. Glutaminyl cyclases unfold glutamyl cyclase activity under mild acid conditions. FEBS Lett. 563: 191-196.
5. Ezura, Y., et al. 2004. Association of multiple nucleotide variations in the pituitary glutaminyl cyclase gene (QPCT) with low radial BMD in adult women. J. Bone Miner. Res. 19: 1296-1301.

CHROMOSOMAL LOCATION

Genetic locus: Qpct (mouse) mapping to 17 E3.

PRODUCT

QPCT 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 QPCT shRNA Plasmid (m): sc-152611-SH and QPCT shRNA (m) Lentiviral Particles: sc-152611-V as alternate gene silencing products.

For independent verification of QPCT (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-152611A, sc-152611B and sc-152611C.

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.

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

QPCT siRNA (m) is recommended for the inhibition of QPCT 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 QPCT gene expression knockdown using RT-PCR Primer: QPCT (m)-PR: sc-152611-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.