



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) 

GPR153 siRNA (m): sc-145710

BACKGROUND

G protein-coupled receptors (GPRs), also known as seven transmembrane receptors, heptahelical receptors or 7TM receptors, comprise a superfamily of proteins that play a role in many different stimulus-response pathways. G protein-coupled receptors translate extracellular signals into intracellular signals (G protein activation) and they respond to a variety of signaling molecules, such as hormones and neurotransmitters. GPR153 (G protein-coupled receptor 153), also known as PGR1, is a 609 amino acid multi-pass membrane protein that functions as an orphan receptor and belongs to the GPR1 family. The gene encoding GPR153 maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 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. Shaaban, S. and Benton, B. 2001. Orphan G protein-coupled receptors: from DNA to drug targets. *Curr. Opin. Drug Discov. Devel.* 4: 535-547.
2. Menzaghi, F., Behan, D.P. and Chalmers, D.T. 2002. Constitutively activated G protein-coupled receptors: a novel approach to CNS drug discovery. *Curr. Drug Targets CNS Neurol. Disord.* 1: 105-121.
3. Szekeres, P.G. 2002. Functional assays for identifying ligands at orphan G protein-coupled receptors. *Receptors Channels* 8: 297-308.
4. Vassilatis, D.K., Hohmann, J.G., Zeng, H., Li, F., Ranchalis, J.E., Mortrud, M.T., Brown, A., Rodriguez, S.S., Weller, J.R., Wright, A.C., Bergmann, J.E. and Gaitanaris, G.A. 2003. The G protein-coupled receptor repertoires of human and mouse. *Proc. Natl. Acad. Sci. USA* 100: 4903-4908.
5. Gloriam, D.E., Schiöth, H.B. and Fredriksson, R. 2005. Nine new human Rhodopsin family G protein-coupled receptors: identification, sequence characterisation and evolutionary relationship. *Biochim. Biophys. Acta* 1722: 235-246.
6. Davies, M.N., Gloriam, D.E., Secker, A., Freitas, A.A., Timmis, J. and Flower, D.R. 2011. Present perspectives on the automated classification of the G protein-coupled receptors (GPCRs) at the protein sequence level. *Curr. Top. Med. Chem.* 11: 1994-2009.

CHROMOSOMAL LOCATION

Genetic locus: Gpr153 (mouse) mapping to 4 E2.

PRODUCT

GPR153 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 GPR153 shRNA Plasmid (m): sc-145710-SH and GPR153 shRNA (m) Lentiviral Particles: sc-145710-V as alternate gene silencing products.

For independent verification of GPR153 (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-145710A, sc-145710B and sc-145710C.

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

GPR153 siRNA (m) is recommended for the inhibition of GPR153 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 GPR153 gene expression knockdown using RT-PCR Primer: GPR153 (m)-PR: sc-145710-PR (20 μ l). 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.