



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 Handels GmbH

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) 

GASP1 siRNA (m): sc-145337

BACKGROUND

GASP-1 (G protein-coupled receptor-associated sorting protein 1), also known as GPRASP1, is a 1395 amino acid member of the GPRASP protein family. In lysosomes, GASP-1 targets receptors for degradation and may also regulate lysosomal sorting and functional down-regulation of G protein-coupled receptors. Localized to the cytoplasm, GASP-1 interacts with the cytoplasmic tails of G protein-coupled receptors, such as D2DR, D4DR, β_2 -AR and DOR-1. GASP-1 has also been found to interact with Per1, a period protein that exhibits circadian rhythms in the suprachiasmatic nucleus (SCN) found in the brain. GASP-1 is expressed mainly in the brain, with lower expression in spinal cord, medulla and substantia nigra.

REFERENCES

1. Patrie, K.M., Drescher, A.J., Goyal, M., Wiggins, R.C. and Margolis, B. 2001. The membrane-associated guanylate kinase protein MAGI-1 binds megalin and is present in glomerular podocytes. *J. Am. Soc. Nephrol.* 12: 667-677.
2. Whistler, J.L., Enquist, J., Marley, A., Fong, J., Gladher, F., Tsuruda, P., Murray, S.R. and Von Zastrow, M. 2002. Modulation of postendocytic sorting of G protein-coupled receptors. *Science* 297: 615-620.
3. Heydorn, A., Søndergaard, B.P., Ersbøll, B., Holst, B., Nielsen, F.C., Haft, C.R., Whistler, J. and Schwartz, T.W. 2004. A library of 7TM receptor C-terminal tails. Interactions with the proposed post-endocytic sorting proteins ERM-binding phosphoprotein 50 (EBP50), N-ethylmaleimide-sensitive factor (NSF), sorting nexin 1 (SNX1), and G protein-coupled receptor-associated sorting protein (GASP). *J. Biol. Chem.* 279: 54291-54303.
4. Simonin, F., Karcher, P., Boeuf, J.J., Matifas, A. and Kieffer, B.L. 2004. Identification of a novel family of G protein-coupled receptor associated sorting proteins. *J. Neurochem.* 89: 766-775.
5. Bartlett, S.E., Enquist, J., Hopf, F.W., Lee, J.H., Gladher, F., Kharazia, V., Waldhoer, M., Mailliard, W.S., Armstrong, R., Bonci, A. and Whistler, J.L. 2005. Dopamine responsiveness is regulated by targeted sorting of D2 receptors. *Proc. Natl. Acad. Sci. USA* 102: 11521-11526.
6. Online Mendelian Inheritance in Man, OMIM[™]. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 300417. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Blakey, J.D., Sayers, I., Ring, S.M., Strachan, D.P. and Hall, I.P. 2009. Positionally cloned asthma susceptibility gene polymorphisms and disease risk in the British 1958 Birth Cohort. *Thorax* 64: 381-387.

CHROMOSOMAL LOCATION

Genetic locus: Gprasp1 (mouse) mapping to X F1.

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.

PRODUCT

GASP1 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 GASP1 shRNA Plasmid (m): sc-145337-SH and GASP1 shRNA (m) Lentiviral Particles: sc-145337-V as alternate gene silencing products.

For independent verification of GASP1 (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-145337A, sc-145337B and sc-145337C.

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

GASP1 siRNA (m) is recommended for the inhibition of GASP1 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 GASP1 gene expression knockdown using RT-PCR Primer: GASP1 (m)-PR: sc-145337-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.