



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) 

Rab 9 p40 siRNA (m): sc-152652

BACKGROUND

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies all of which are thought to play an important role in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the endoplasmic reticulum (ER) to various stacks of the Golgi complex and to secretory vesicles involves the movement of carrier vesicles and requires Rab protein function. Rab proteins are also an integral part of endocytic pathways. Rab 9 p40, also known as RABEPK (Rab9 effector protein with kelch motifs) or p40 is a 372 amino acid protein that localizes to both the cytoplasm and the endosomal membrane and contains 5 kelch repeats. Existing as multiple alternatively spliced isoforms, Rab 9 p40 interacts with PIP5KIII and functions as a Rab 9 effector protein that is required for protein transport from the endosome to the *trans*-Golgi network. Rab 9 p40 is subject to post-translational phosphorylation on select serine residues.

REFERENCES

- Lombardi, D., Soldati, T., Riederer, M.A., Goda, Y., Zerial, M. and Pfeffer, S.R. 1993. Rab9 functions in transport between late endosomes and the *trans* Golgi network. *EMBO J.* 12: 677-682.
- Shapiro, A.D., Riederer, M.A. and Pfeffer, S.R. 1993. Biochemical analysis of rab9, a Ras-like GTPase involved in protein transport from late endosomes to the *trans* Golgi network. *J. Biol. Chem.* 268: 6925-6931.
- Díaz, E., Schimmöller, F. and Pfeffer, S.R. 1997. A novel Rab9 effector required for endosome-to-TGN transport. *J. Cell Biol.* 138: 283-290.
- Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 605962. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Barbero, P., Bittova, L. and Pfeffer, S.R. 2002. Visualization of Rab9-mediated vesicle transport from endosomes to the *trans*-Golgi in living cells. *J. Cell Biol.* 156: 511-518.
- Ikonomov, O.C., Sbrissa, D., Mlak, K., Deeb, R., Fligger, J., Soans, A., Finley, R.L. and Shisheva, A. 2003. Active PIKfyve associates with and promotes the membrane attachment of the late endosome-to-*trans*-Golgi network transport factor Rab9 effector p40. *J. Biol. Chem.* 278: 50863-50871.
- Aivazian, D., Serrano, R.L. and Pfeffer, S. 2006. TIP47 is a key effector for Rab9 localization. *J. Cell Biol.* 173: 917-926.

CHROMOSOMAL LOCATION

Genetic locus: Rabepk (mouse) mapping to 2 B.

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

Rab 9 p40 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 Rab 9 p40 shRNA Plasmid (m): sc-152652-SH and Rab 9 p40 shRNA (m) Lentiviral Particles: sc-152652-V as alternate gene silencing products.

For independent verification of Rab 9 p40 (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-152652A, sc-152652B and sc-152652C.

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

Rab 9 p40 siRNA (m) is recommended for the inhibition of Rab 9 p40 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 Rab 9 p40 gene expression knockdown using RT-PCR Primer: Rab 9 p40 (m)-PR: sc-152652-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.