

# Produktinformation



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# Rab 26 siRNA (m): sc-152631



The Power to Question

#### **BACKGROUND**

The Ras-related superfamily of guanine nucleotide binding proteins includes the R-Ras, Rap, Ral/Rec and Rho/Rab subfamilies. Increasing data suggests an important role for Rab proteins in either endocytosis or in biosynthetic protein transport. The process of transporting newly synthesized proteins from the endoplasmic reticulum 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 26, also known as V46133, is a 256 amino acid member of the Rab protein family. Localized to the cell membrane on the cytoplasmic side, Rab 26 is predominately expressed in brain. Rab 26 is thought to be involved in exocrine secretion, more specifically the regulation of the secretion of acinar granules in the parotid gland.

#### **REFERENCES**

- 1. Opdam, F.J., Kamps, G., Croes, H., van Bokhoven, H., Ginsel, L.A. and Fransen, J.A. 2000. Expression of Rab small GTPases in epithelial Caco-2 cells: Rab21 is an apically located GTP-binding protein in polarised intestinal epithelial cells. Eur. J. Cell Biol. 79: 308-316.
- Yoshie, S., Imai, A., Nashida, T. and Shimomura, H. 2000. Expression, characterization, and localization of Rab26, a low molecular weight GTP-binding protein, in the rat parotid gland. Histochem. Cell Biol. 113: 259-263.
- Seki, N., Yoshikawa, T., Hattori, A., Miyajima, N., Muramatsu, M. and Saito, T. 2000. cDNA cloning of a human RAB26-related gene encoding a Ras-like GTP-binding protein on chromosome 16p13.3 region. J. Hum. Genet. 45: 309-314.
- Fukuda, M. 2003. Distinct Rab binding specificity of Rim1, Rim2, rabphilin, and Noc2. Identification of a critical determinant of Rab3A/Rab27A recognition by Rim2. J. Biol. Chem. 278: 15373-15380.
- 5. Swick, L. and Kapatos, G. 2006. A yeast 2-hybrid analysis of human GTP cyclohydrolase I protein interactions. J. Neurochem. 97: 1447-1455.
- Tian, X., Jin, R.U., Bredemeyer, A.J., Oates, E.J., Błazewska, K.M., McKenna, C.E. and Mills, J.C. 2010. RAB26 and RAB3D are direct transcriptional targets of MIST1 that regulate exocrine granule maturation. Mol. Cell. Biol. 30: 1269-1284.

#### **CHROMOSOMAL LOCATION**

Genetic locus: Rab26 (mouse) mapping to 17 A3.3.

#### **PRODUCT**

Rab 26 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Rab 26 shRNA Plasmid (m): sc-152631-SH and Rab 26 shRNA (m) Lentiviral Particles: sc-152631-V as alternate gene silencing products.

For independent verification of Rab 26 (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-152631A, sc-152631B and sc-152631C.

#### STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20 $^{\circ}$  C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20 $^{\circ}$  C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330  $\mu$ l of the RNAse-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNAse-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

#### **APPLICATIONS**

Rab 26 siRNA (m) is recommended for the inhibition of Rab 26 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 Rab 26 gene expression knockdown using RT-PCR Primer: Rab 26 (m)-PR: sc-152631-PR (20  $\mu$ 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.

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