

Rabr siRNA (h): sc-89448

BACKGROUND

Rabr, also known as AGFG2 (Arf-GAP domain and FG repeats-containing protein 2), is a 481 amino acid member of the HIV-1 REV binding protein (HRB) family and has one Arf-GAP zinc finger domain, several phe-gly (FG) motifs, and four asn-pro-phe (NPF) motifs. Rabr shares 46% identity with Rab. Both Rab and Rabr contain a zinc finger region near the N terminus, several phe-gly (FG) motifs, which is characteristic of nucleoporin-like proteins, and four NPF motifs located in the C-terminal region. Rabr interacts with Eps15 homology (EH) domains and plays a role in the REV export pathway, which mediates the nucleocytoplasmic transfer of proteins and RNAs. Existing as two alternatively spliced isoforms, the Rabr gene is conserved in chimpanzee, canine, bovine, mouse, rat, *A. thaliana* and rice, and maps to human chromosome 7q22.1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: AGFG2 (human) mapping to 7q22.1.

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

Rabr siRNA (h) 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 Rabr shRNA Plasmid (h): sc-89448-SH and Rabr shRNA (h) Lentiviral Particles: sc-89448-V as alternate gene silencing products.

For independent verification of Rabr (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-89448A, sc-89448B and sc-89448C.

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

Rabr siRNA (h) is recommended for the inhibition of Rabr expression in human 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 Rabr gene expression knockdown using RT-PCR Primer: Rabr (h)-PR: sc-89448-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.