

SCYL1BP1 siRNA (m): sc-153278

BACKGROUND

SCYLBP1 (SCYL-like 1-binding protein 1), also known RAB6-interacting golgin or NTKLBP1 (N-terminal kinase-like-binding protein 1), is a 394 amino acid protein belongs to the GORAB family. SCYL1BP1 is known to interact with SCYL1, RAB6A/RAB6 and RCHY1. Specifically localized to the Golgi apparatus, SCYL1BP1 exists as four alternatively spliced isoforms. Defects in SCYL1BP1 lead to geroderma osteodysplastica (GO), which is a condition of the skin that is characterized by a wrinkled, lax appearance. This rare autosomal recessive disease also causes osteoporosis, bone fractures and retarded growth. The gene encoding SCYL1BP1 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. Aberrations in chromosome 1 are found in a variety of cancers, including head and neck cancer, malignant melanoma and multiple myeloma.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Gorab (mouse) mapping to 1 H2.1.

PRODUCT

SCYL1BP1 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 SCYL1BP1 shRNA Plasmid (m): sc-153278-SH and SCYL1BP1 shRNA (m) Lentiviral Particles: sc-153278-V as alternate gene silencing products.

For independent verification of SCYL1BP1 (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-153278A, sc-153278B and sc-153278C.

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

SCYL1BP1 siRNA (m) is recommended for the inhibition of SCYL1BP1 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 SCYL1BP1 gene expression knockdown using RT-PCR Primer: SCYL1BP1 (m)-PR: sc-153278-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.