

RLBP1L2 siRNA (h): sc-95286

BACKGROUND

RLBP1L2 (retinaldehyde binding protein 1-like 2), also known as CLVS2 (clavesin 2), is a 327 amino acid protein that contains one CRAL-TRIO domain. RLBP1L2's CRAL-TRIO domain is required for targeting to the membrane and for binding phosphatidylinositol 3,5-bisphosphate (PtdIns(3,5)P₂). It has been suggested that RLBP1L2 is required for normal morphology of late endosomes and possibly lysosomes in neurons. The RLBP1L2 protein forms a complex with clathrin heavy chain and γ -adaptin. Existing as two alternatively spliced isoforms, the RLBP1L2 gene is conserved in chimpanzee, canine, bovine, mouse, rat, chicken, zebrafish and mosquito, and maps to human chromosome 6q22.31. Making up nearly 6% of the human genome, chromosome 6 contains around 1,200 genes within 170 million base pairs of sequence. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer suggesting the presence of a cancer susceptibility locus. A bipolar disorder susceptibility locus has also been identified on the q arm of chromosome 6.

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PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CHROMOSOMAL LOCATION

Genetic locus: CLVS2 (human) mapping to 6q22.31.

PRODUCT

RLBP1L2 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 RLBP1L2 shRNA Plasmid (h): sc-95286-SH and RLBP1L2 shRNA (h) Lentiviral Particles: sc-95286-V as alternate gene silencing products.

For independent verification of RLBP1L2 (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-95286A, sc-95286B and sc-95286C.

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

RLBP1L2 siRNA (h) is recommended for the inhibition of RLBP1L2 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 RLBP1L2 gene expression knockdown using RT-PCR Primer: RLBP1L2 (h)-PR: sc-95286-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.