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PRB1 siRNA (m): sc-152442

BACKGROUND

Salivary proline-rich proteins are synthesized in acinar cells of salivary glands and function as essential components of parotid and submandibular saliva. There are six members of the human salivary proline-rich protein family, namely, PRB1, PRB2, PRB3, PRB4, PRH1 and PRH2, each of which is encoded by a gene approximately 4kb long with an exon containing a proline-rich portion. Thought to originate from a single ancestral gene, members of the salivary proline-rich protein family are encoded by genes that map to a cluster on human chromosome 12p13. PRB1 (proline-rich protein BstNI subfamily 1), also known as basic salivary proline-rich protein 1, PRB1M, PM, PMF, PMS, salivary proline-rich protein or PRB1L, is a 392 amino acid secreted protein that is cleaved into three chains and contains multiple tandem repeats.

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CHROMOSOMAL LOCATION

Genetic locus: Prb1 (mouse) mapping to 6 G1.

PRODUCT

PRB1 siRNA (m) is a target-specific 19-25 nt siRNA 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 PRB1 shRNA Plasmid (m): sc-152442-SH and PRB1 shRNA (m) Lentiviral Particles: sc-152442-V as alternate gene silencing products.

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

PRB1 siRNA (m) is recommended for the inhibition of PRB1 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 PRB1 gene expression knockdown using RT-PCR Primer: PRB1 (m)-PR: sc-152442-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.

PROTOCOLS

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