

PABPNL1 siRNA (m): sc-151982

BACKGROUND

PABPNL1 (poly(A)-binding protein nuclear-like 1), also known as EPABP2 (embryonic polyadenylate-binding protein 2) or PABPN1L, is a 278 amino acid cytoplasmic protein that contains one RRM (RNA recognition motif) domain and exists as four alternatively spliced isoforms. Expressed in various adult tissues, PABPNL1 binds the poly(A) tail of mRNA. The gene that encodes PABPNL1 consists of nearly 5,000 bases and maps to human chromosome 16q24.3. Encoding over 900 genes and consisting of approximately 90 million base pairs, chromosome 16 makes up nearly 3% of the human genome and is associated with a variety of genetic disorders, such as giant axonal neuropathy, Rubinstein-Taybi syndrome and Crohn's disease. An association with systemic lupus erythematosus and a number of other autoimmune disorders with the pericentromeric region of chromosome 16 has led to the identification of SLC5A11 as a potential autoimmune modifier.

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CHROMOSOMAL LOCATION

Genetic locus: Pabpn1l (mouse) mapping to 8 E1.

PRODUCT

PABPNL1 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 PABPNL1 shRNA Plasmid (m): sc-151982-SH and PABPNL1 shRNA (m) Lentiviral Particles: sc-151982-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

PABPNL1 siRNA (m) is recommended for the inhibition of PABPNL1 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 PABPNL1 gene expression knockdown using RT-PCR Primer: PABPNL1 (m)-PR: sc-151982-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.