SANTA CRUZ BIOTECHNOLOGY, INC.

GPBP1L1 siRNA (h): sc-78775

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The Power to Question

BACKGROUND

Transcription factors are required for the initiation of transcription. They regulate transcription by binding to DNA at specific nucleotide sequences within promoters and enhancers. Transcription factors, which may also bind to RNA polymerase or to other transcription factors, are involved in the preinitiation complex formation. Upstream transcription factors and inducible transcription factors bind upstream of the initiation site to repress or stimulate transcription. Upstream factors are unregulated, while inducible factors require inhibition or activation. GPBP1L1 (GC-rich promoter binding protein 1-like 1), also known as vasculin-like protein 1 or SP192, is a 474 amino acid protein belonging to the vasculin family. Localizing to nucleus, GPBP1L1 may function as a transcription factor. The gene encoding GPBP1L1 maps to human chromosome 1p34.1 and mouse chromosome 4 D1.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: GPBP1L1 (human) mapping to 1p34.1.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

GPBP1L1 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see GPBP1L1 shRNA Plasmid (h): sc-78775-SH and GPBP1L1 shRNA (h) Lentiviral Particles: sc-78775-V as alternate gene silencing products.

For independent verification of GPBP1L1 (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-78775A, sc-78775B and sc-78775C.

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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

GPBP1L1 siRNA (h) is recommended for the inhibition of GPBP1L1 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 µM in 66 µl. 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 GPBP1L1 gene expression knockdown using RT-PCR Primer: GPBP1L1 (h)-PR: sc-78775-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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