SANTA CRUZ BIOTECHNOLOGY, INC.

HS1BP3 siRNA (m): sc-146083

BACKGROUND

HS1BP3 (HCLS1-binding protein 3), also known as ETM2 or HS1-BP3, is a 392 amino acid protein that contains one PX (phox homology) domain, a leucine zipper, immunoreceptor tyrosine-based inhibitory motif-like motifs and multiple proline-rich regions. Expressed primarily in brain, HS1BP3 is encoded by a gene mapping to human chromosome 2p24.1. The gene encoding HS1BP3 is frequently mutated in familial essential tremor, a disorder characterized by kinetic tremor the the hands, voice or head, though there is no correlation to Parkinson disease. HS1BP3 interacts with HAX-1's SH3 domain, and may also play a role in the regulation of catecholamine and serotonin metabolism. Acting as a regulator of IL-2 signaling, HS1BP3 is likely involved in lymphocyte activation.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Hs1bp3 (mouse) mapping to 12 A1.1.

PROTOCOLS

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

PRODUCT

HS1BP3 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see HS1BP3 shRNA Plasmid (m): sc-146083-SH and HS1BP3 shRNA (m) Lentiviral Particles: sc-146083-V as alternate gene silencing products.

For independent verification of HS1BP3 (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-146083A, sc-146083B and sc-146083C.

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

HS1BP3 siRNA (m) is recommended for the inhibition of HS1BP3 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 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 HS1BP3 gene expression knockdown using RT-PCR Primer: HS1BP3 (m)-PR: sc-146083-PR (20 µl). 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.