SANTA CRUZ BIOTECHNOLOGY, INC.

DnaJC12 siRNA (h): sc-90565

BACKGROUND

The DnaJ family comprises a group of chaperone proteins that contain a J domain and have diverse cellular localization and functions. DnaJ proteins play a critical role in the HSP 70 chaperone machine by interacting with HSP 70 to stimulate ATP hydrolysis and are also important mediators of proteolysis and protein degradation. DnaJC12 (DnaJ (Hsp40) homolog, subfamily C, member 12), also known as JDP1 (J domain-containing protein 1), is a 198 amino acid protein that contains one J domain and is highly expressed in testis, brain and heart. Existing as two alternatively spliced isoforms, designated A and B, DnaJC12 may play a role in protein folding and export and is thought to be involved in estrogen control and the development of breast cancer. The gene encoding DnaJC12 maps to human chromosome 10q21.3, which houses over 1,200 genes and comprises nearly 4.5% of the human genome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: DNAJC12 (human) mapping to 10q21.3.

PRODUCT

DnaJC12 siRNA (h) 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see DnaJC12 shRNA Plasmid (h): sc-90565-SH and DnaJC12 shRNA (h) Lentiviral Particles: sc-90565-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 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

DnaJC12 siRNA (h) is recommended for the inhibition of DnaJC12 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 DnaJC12 gene expression knockdown using RT-PCR Primer: DnaJC12 (h)-PR: sc-90565-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.

PROTOCOLS

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