SANTA CRUZ BIOTECHNOLOGY, INC.

DnaJC9 siRNA (m): sc-143113

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. DnaJC9 (DnaJ (HSP 40) homolog, subfamily C, member 9), also designated HDJC9, JDD1 or DnaJ protein SB73, is a 260 amino acid protein found at moderate levels in most tissues with highest expression in the germinal zone of the central nervous system, testis, ovary, renal cortex and fetal liver. A member of the DnaJ family, DnaJC9 contains one N-terminal J domain but lacks the typical G/F and zinc finger regions that are typical of DnaJ family members. DnaJC9 localiizes to nuclei under normal conditions but may be transported to cytoplasm and plasma membrane when exposed to heat shock.

REFERENCES

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4. Qiu, X.B., et al. 2006. The diversity of the DnaJ/HSP 40 family, the crucial partners for HSP 70 chaperones. Cell. Mol. Life Sci. 63: 2560-2570.
5. Han, C., et al. 2007. HDJC9, a novel human type C DnaJ/HSP 40 member interacts with and cochaperones HSP 70 through the J domain. Biochem. Biophys. Res. Commun. 353: 280-285.
6. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 611206. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
7. Crawford, N.P., et al. 2009. The metastasis efficiency modifier ribosomal RNA processing 1 homolog B (RRP1B) is a chromatin-associated factor. J. Biol. Chem. 284: 28660-28673.

CHROMOSOMAL LOCATION

Genetic locus: Dnajc9 (mouse) mapping to 14 A3.

PRODUCT

DnaJC9 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see DnaJC9 shRNA Plasmid (m): sc-143113-SH and DnaJC9 shRNA (m) Lentiviral Particles: sc-143113-V as alternate gene silencing products.

RESEARCH USE

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

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

DnaJC9 siRNA (m) is recommended for the inhibition of DnaJC9 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 DnaJC9 gene expression knockdown using RT-PCR Primer: DnaJC9 (m)-PR: sc-143113-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.