SANTA CRUZ BIOTECHNOLOGY, INC.

AHSA2 siRNA (h): sc-95029

BACKGROUND

AHSA2 (AHA1, activator of heat shock 90 kDa protein ATPase homolog 2), also known as Hch1, is a 299 amino acid protein belonging to the AHA1 family. Encoded by a gene that maps to human chromosome 2p15, AHSA2 exists as three alternatively spliced isoforms and participates in chaperone binding and ATPase activator activity. Highly conserved from yeast to man, AHSA2 is necessary for cell viability during less than ideal growth conditions, such as low HSP 90 levels. AHSA2 acts as a co-chaperone that stimulates ATPase function for HSP 90, a vital and plentiful stress protein in eukaryotic cytosol. Microdeletion syndrome 2p15-p16.1, which includes AHSA2, is characterized by intellectual disability, prenatal and postnatal growth retardation, microcephaly, high and broad nasal root, long eyelashes and camptodactyly.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: AHSA2 (human) mapping to 2p15.

PRODUCT

AHSA2 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 AHSA2 shRNA Plasmid (h): sc-95029-SH and AHSA2 shRNA (h) Lentiviral Particles: sc-95029-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

AHSA2 siRNA (h) is recommended for the inhibition of AHSA2 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 AHSA2 gene expression knockdown using RT-PCR Primer: AHSA2 (h)-PR: sc-95029-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.