SANTA CRUZ BIOTECHNOLOGY, INC.

HAUS4 siRNA (h): sc-92323

BACKGROUND

The human augmin complex (HAUS) is an evolutionarily conserved 8-subunit protein complex that was initially discovered in *Drosophila*. The HAUS complex is essential for microtubule generation, centrosome integrity, mitotic spindle assembly and completion of cytokinesis. HAUS4 (HAUS augmin-like complex subunit 4), also known as C14orf94, is a 363 amino acid cytoplasmic protein belonging to the HAUS4 family. As a member of the HAUS complex, HAUS4 participates in mitotic spindle assembly, maintenance of centrosome integrity and cessation of cytokinesis. The HAUS complex interacts with the γ-tubulin ring complex in a process that is required for spindle assembly. Existing as four alternatively spliced isoforms, the gene encoding HAUS4 maps to human chromosome 14q11.2 and mouse chromosome 14 C3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HAUS4 (human) mapping to 14q11.2.

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.

PRODUCT

HAUS4 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 HAUS4 shRNA Plasmid (h): sc-92323-SH and HAUS4 shRNA (h) Lentiviral Particles: sc-92323-V as alternate gene silencing products.

For independent verification of HAUS4 (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-92323A, sc-92323B and sc-92323C.

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

HAUS4 siRNA (h) is recommended for the inhibition of HAUS4 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 HAUS4 gene expression knockdown using RT-PCR Primer: HAUS4 (h)-PR: sc-92323-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.