SANTA CRUZ BIOTECHNOLOGY, INC.

HAUS6 siRNA (h): sc-92778

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. HAUS6 (HAUS augmin-like complex, subunit 6), also known as FAM29A or Dgt6, is a 955 amino acid component of the augmin complex. Required for mitotic progression, HAUS6 localizes to cytoplasm, cytoskeleton, mitotic spindle microtubules and interphase centrosomes, and undergoes post-translational phosphorylation following mitosis on multiple serine and threonine residues. HAUS6 exists as two alternatively spliced isoforms that are encoded by a gene located on human chromosome 9p22.1.

REFERENCES

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2. Goshima, G., Mayer, M., Zhang, N., Stuurman, N. and Vale, R.D. 2008. Augmin: a protein complex required for centrosome-independent microtubule generation within the spindle. J. Cell Biol. 181: 421-429.
3. Zhu, H., Coppinger, J.A., Jang, C.Y., Yates, J.R. and Fang, G. 2008. FAM29A promotes microtubule amplification via recruitment of the NEDD1-γ-Tubulin complex to the mitotic spindle. J. Cell Biol. 183: 835-848.
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5. Uehara, R., Nozawa, R.S., Tomioka, A., Petry, S., Vale, R.D., Obuse, C. and Goshima, G. 2009. The augmin complex plays a critical role in spindle microtubule generation for mitotic progression and cytokinesis in human cells. Proc. Natl. Acad. Sci. USA 106: 6998-7003.

CHROMOSOMAL LOCATION

Genetic locus: HAUS6 (human) mapping to 9p22.1.

PRODUCT

HAUS6 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 HAUS6 shRNA Plasmid (h): sc-92778-SH and HAUS6 shRNA (h) Lentiviral Particles: sc-92778-V as alternate gene silencing products.

For independent verification of HAUS6 (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-92778A, sc-92778B and sc-92778C.

PROTOCOLS

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

HAUS6 siRNA (h) is recommended for the inhibition of HAUS6 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 HAUS6 gene expression knockdown using RT-PCR Primer: HAUS6 (h)-PR: sc-92778-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.