SANTA CRUZ BIOTECHNOLOGY, INC.

MEAF6 siRNA (h): sc-88694

BACKGROUND

MEAF6 (MYST/Esa1-associated factor 6), also known as Eaf6 or NY-SAR-91, is a 191 amino acid nuclear protein belonging to the EAF6 family. MEAF6 is a component of the NuA4 histone acetyltransferase complex, which is involved in transcriptional activation of select genes principally by acetylation of nucleosomal Histone H4 and H2A. The gene encoding MEAF6 localizes to chromosome 1p34.3 and, due to alternative splicing events, MEAF6 exists in at least three isoforms. Chromosome 1 is the largest human chromosome spanning about 260 million base pairs and making up 8% of the human genome. There are about 3,000 genes on chromosome 1, and considering the great number of genes there are also a large number of diseases associated with chromosome 1 such as Hutchinson-Gilford progeria, Stickler syndrome, Parkinsons, Gaucher disease and Usher syndrome.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MEAF6 (human) mapping to 1p34.3.

PRODUCT

MEAF6 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 MEAF6 shRNA Plasmid (h): sc-88694-SH and MEAF6 shRNA (h) Lentiviral Particles: sc-88694-V as alternate gene silencing products.

For independent verification of MEAF6 (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-88694A, sc-88694B and sc-88694C.

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

MEAF6 siRNA (h) is recommended for the inhibition of MEAF6 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 MEAF6 gene expression knockdown using RT-PCR Primer: MEAF6 (h)-PR: sc-88694-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.