SANTA CRUZ BIOTECHNOLOGY, INC.

MAU-2 siRNA (h): sc-97748

BACKGROUND

MAU-2 (MAU2 chromatid cohesion factor homolog), also known as SCC4, is a 613 amino acid protein that contains four TPR repeats and belongs to the SCC4/MAU-2 family. Localized to the nucleus, MAU-2 binds to chromatin at the end of mitosis until prophase. During interphase, MAU-2 is essential for the association of the cohesin complex with chromatin. MAU-2 is also involved in sister chromatid cohesion in addition to the normal progression to prometaphase. Interaction with NIPBL via the N-terminus of MAU-2 is necessary to form the cohesion loading complex. Existing as three alternatively spliced isoforms, MAU-2 is encoded by a gene that maps to human chromosome 19p13.11. Chromosome 19 consists of over 63 million bases, houses approximately 1,400 genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin (Ig) superfamily members, including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG families, and Fc receptors (FcRs).

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MAU2 (human) mapping to 19p13.11.

RESEARCH USE

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

PRODUCT

MAU-2 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 MAU-2 shRNA Plasmid (h): sc-97748-SH and MAU-2 shRNA (h) Lentiviral Particles: sc-97748-V as alternate gene silencing products.

For independent verification of MAU-2 (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-97748A, sc-97748B and sc-97748C.

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

MAU-2 siRNA (h) is recommended for the inhibition of MAU-2 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 MAU-2 gene expression knockdown using RT-PCR Primer: MAU-2 (h)-PR: sc-97748-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.