SANTA CRUZ BIOTECHNOLOGY, INC.

GIN1 siRNA (m): sc-145406

BACKGROUND

GIN1 (gypsy retrotransposon integrase-like protein 1), also known as TGIN1 (Ty3/Gypsy integrase 1) or ZH2C2 (zinc finger H2C2 domain-containing protein), is a 522 amino acid protein containing one integrase catalytic domain. Widely expressed, GIN1 is also found in tumors originating from parathyroid gland, colon, stomach, bladder, uterus and prostate. Three isoforms of GIN1 are produced by alternative splicing events. The gene encoding GIN1 maps to human chromsome 5q21.1. Chromosome 5 contains 181 million base pairs and comprises nearly 6% of the human genome. Deletion of the p arm of chromosome 5 leads to Cri du chat syndrome, while deletion of the q arm of chromosome 5 altogether is common in therapy-related acute myelogenous leukemias and myelodysplastic syndrome. Treacher Collins syndrome, Cockayne syndrome and familial adenomatous polyposis are also associated with chromosome 5.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Gin1 (mouse) mapping to 1 D.

PROTOCOLS

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

PRODUCT

GIN1 siRNA (m) 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 GIN1 shRNA Plasmid (m): sc-145406-SH and GIN1 shRNA (m) Lentiviral Particles: sc-145406-V as alternate gene silencing products.

For independent verification of GIN1 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-145406A, sc-145406B and sc-145406C.

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

GIN1 siRNA (m) is recommended for the inhibition of GIN1 expression in mouse 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 GIN1 gene expression knockdown using RT-PCR Primer: GIN1 (m)-PR: sc-145406-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.