

MSAP siRNA (m): sc-149658

BACKGROUND

MSAP (MIR-interacting saposin-like protein), also known as CNPY2 (canopy 2 homolog), TMEM4 or ZSIG9, is a 182 amino acid protein of the endoplasmic reticulum that functions in the positive regulation of neurite outgrowth. Expressed at highest levels in pancreas, placenta and liver, MSAP belongs to the canopy family and prevents MYL9 ubiquitination and proteasomal degradation. Existing as two alternatively spliced isoforms, MSAP is encoded by a gene that maps to human chromosome 12q13.2 and mouse chromosome 10 D3. Human chromosome 12 encodes over 1,100 genes and comprises approximately 4.5% of the human genome. Chromosome 12 is associated with a variety of diseases and afflictions, including hypochondrogenesis, achondrogenesis, Kniest dysplasia, Noonan syndrome and trisomy 12p, which causes facial developmental defects and seizure disorders.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Cnpy2 (mouse) mapping to 10 D3.

PROTOCOLS

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

PRODUCT

MSAP 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see MSAP shRNA Plasmid (m): sc-149658-SH and MSAP shRNA (m) Lentiviral Particles: sc-149658-V as alternate gene silencing products.

For independent verification of MSAP (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-149658A, sc-149658B and sc-149658C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

MSAP siRNA (m) is recommended for the inhibition of MSAP 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 μ M in 66 μ l. 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 MSAP gene expression knockdown using RT-PCR Primer: MSAP (m)-PR: sc-149658-PR (20 μ l). 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.