

MCM3AP siRNA (h): sc-91405

BACKGROUND

Minichromosome maintenance protein 3 (MCM3) is a protein essential for the initiation of DNA replication. MCM3-associated protein (MCM3AP), also known as GANP or MAP80, is a 1,980 amino acid protein which binds to MCM3. MCM3AP is an acetyltransferase that acetylates MCM3, thereby playing an indirect role in DNA replication. MCM3AP is also believed to be involved in the nuclear localization of MCM3. Localized to the nucleus and the cytoplasm, MCM3AP is thought to have phosphorylation-dependent DNA-primase activity that is up-regulated in germinal center regions. MCM3AP contains a nuclear localization signal, a coiled-coil structure and four LXXLL motifs.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: MCM3AP (human) mapping to 21q22.3.

PRODUCT

MCM3AP 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see MCM3AP shRNA Plasmid (h): sc-91405-SH and MCM3AP shRNA (h) Lentiviral Particles: sc-91405-V as alternate gene silencing products.

For independent verification of MCM3AP (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-91405A, sc-91405B and sc-91405C.

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

MCM3AP siRNA (h) is recommended for the inhibition of MCM3AP 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 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 MCM3AP gene expression knockdown using RT-PCR Primer: MCM3AP (h)-PR: sc-91405-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.