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SANTA CRUZ BIOTECHNOLOGY, INC.

MAP-1A siRNA (m): sc-43393

BACKGROUND

Microtubules, the primary component of the cytoskeletal network, interact with proteins called microtubule-associated proteins (MAPs). The microtubule-associated proteins can be divided into two groups, structural and dynamic. The structural microtubule-associated proteins, MAP-1A, MAP-1B, MAP-2A, MAP-2B and MAP-2C, stimulate Tubulin assembly, enhance microtubule stability and influence the spatial distribution of microtubules within cells. Both MAP-1 and, to a greater extent, MAP-2 have been implicated as agents of microtubule depolymerization by suppressing the dynamic instability of the microtubules. The suppression of microtubule dynamic instability by the MAP proteins is thought to be associated with phosphorylation of the MAPs.

REFERENCES

1. Sloboda, R.D., et al. 1976. Microtubule-associated proteins and the stimulation of Tubulin assembly *in vitro*. Biochemistry 15: 4497-4505.
2. Murphy, D.B., et al. 1977. Role of Tubulin-associated proteins in microtubule nucleation and elongation. J. Mol. Biol. 117: 33-52.
3. Hasegawa, M., et al. 1990. Immunochemical evidence that fragments of phosphorylated MAP-5 (MAP-1B) are bound to neurofibrillary tangles in Alzheimer's disease. Neuron 4: 909-918.
4. MacRae, T.H. 1992. Towards an understanding of microtubule function and cell organization: an overview. Biochem. Cell Biol. 70: 835-841.
5. Davis, R.J. 1993. The mitogen-activated protein kinase signal transduction pathway. J. Biol. Chem. 268: 14553-14556.
6. Maccioni, R.B., et al. 1995. Role of microtubule-associated proteins in the control of microtubule assembly. Physiol. Rev. 75: 835-864.
7. Dhamodharan, R., et al. 1995. Modulation of microtubule dynamic instability *in vivo* by brain microtubule associated proteins. J. Cell Sci. 108: 1679-1689.
8. Vandecandelaere, A., et al. 1996. Differences in the regulation of microtubule dynamics by microtubule-associated proteins MAP-1B and MAP-2. Cell Motil. Cytoskeleton 35: 134-146.

CHROMOSOMAL LOCATION

Genetic locus: Mtap1a (mouse) mapping to 2 E5.

PRODUCT

MAP-1A 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 MAP-1A shRNA Plasmid (m): sc-43393-SH and MAP-1A shRNA (m) Lentiviral Particles: sc-43393-V as alternate gene silencing products.

For independent verification of MAP-1A (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-43393A, sc-43393B and sc-43393C.

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

MAP-1A siRNA (m) is recommended for the inhibition of MAP-1A 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 MAP-1A gene expression knockdown using RT-PCR Primer: MAP-1A (m)-PR: sc-43393-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.