

Katanin p80 B1 siRNA (m): sc-146344

BACKGROUND

Microtubules are polymers of alpha and beta subunits that form the mitotic spindle and assist in the organization of membranous organelles during interphase. Katanin is a heterodimer complex that severs microtubules in an ATP-dependent manner. The severing of microtubules by the Katanin complex may promote reorganization of cellular microtubule arrays and release of microtubules from the centrosome following nucleation. The Katanin complex is composed of a 60 kDa subunit (Katanin p60 A1) and a 80 kDa accessory protein (Katanin p80 B1). Katanin p60 A1 is responsible for the severing and disassembly of microtubules, while Katanin p80 B1 targets the complex to the centrosome.

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CHROMOSOMAL LOCATION

Genetic locus: Katnb1 (mouse) mapping to 8 D1.

PRODUCT

Katanin p80 B1 siRNA (m) is a target-specific 19-25 nt siRNA 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 Katanin p80 B1 shRNA Plasmid (m): sc-146344-SH and Katanin p80 B1 shRNA (m) Lentiviral Particles: sc-146344-V as alternate gene silencing products.

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

Katanin p80 B1 siRNA (m) is recommended for the inhibition of Katanin p80 B1 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 Katanin p80 B1 gene expression knockdown using RT-PCR Primer: Katanin p80 B1 (m)-PR: sc-146344-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.

PROTOCOLS

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