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Dynactin 5 siRNA (m): sc-143204

BACKGROUND

Dynactin is a multisubunit complex that functions as a binding partner for the Dynein microtubule motor. Dynactin-Dynein binding may be required for most, if not all, cytoplasmic Dynein-driven activities and is thought to contribute to the functional diversity of Dynein. Dynactin 5, also known as Dynactin p25, is an evolutionarily conserved component of the Arp1 filament pointed-end-binding subcomplex of the Dynactin shoulder complex. This pointed-end-binding subcomplex also consists of Dynactin 6, Dynactin p62 and ACTR10. Dynactin 5, along with Dynactin p62 and Dynactin 6, is believed to function in the regulation of dynactin-membranous cargo interactions. Further supporting its role in cargo binding, Dynactin 5 is essential for retrograde vesicle trafficking. Dynactin 5 contains an isoleucine-patch motif and exhibits a left-handed parallel β -helix fold.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Dctn5 (mouse) mapping to 7 F3.

PRODUCT

Dynactin 5 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 Dynactin 5 shRNA Plasmid (m): sc-143204-SH and Dynactin 5 shRNA (m) Lentiviral Particles: sc-143204-V as alternate gene silencing products.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

Dynactin 5 siRNA (m) is recommended for the inhibition of Dynactin 5 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 Dynactin 5 gene expression knockdown using RT-PCR Primer: Dynactin 5 (m)-PR: sc-143204-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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