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TRAPPC6B siRNA (m): sc-154590

BACKGROUND

TRAPPC6B (trafficking protein particle complex 6B), also known as TPC6, is a 158 amino acid protein that localizes to the Golgi apparatus and the endoplasmic reticulum. Belonging to the TRAPP (transport protein particle) small subunits family and the BET3 subfamily, TRAPPC6B may play a role in vesicular transport during the biogenesis of melanosomes. TRAPPC6B is part of the multisubunit TRAPP tethering complex, a large multiprotein complex involved in endoplasmic reticulum-to-Golgi and intra-Golgi traffic. TRAPPC6B exists as a heterodimer with TRAPPC3 and undergoes alternative splicing to produce two isoforms. TRAPPC6B is encoded by a gene located on human chromosome 14, which contains about 700 genes and 106 million base pairs and makes up about 3.5% of human cellular DNA.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Trappc6b (mouse) mapping to 12 C1.

PROTOCOLS

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

PRODUCT

TRAPPC6B 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 TRAPPC6B shRNA Plasmid (m): sc-154590-SH and TRAPPC6B shRNA (m) Lentiviral Particles: sc-154590-V as alternate gene silencing products.

For independent verification of TRAPPC6B (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-154590A, sc-154590B and sc-154590C.

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

TRAPPC6B siRNA (m) is recommended for the inhibition of TRAPPC6B 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 TRAPPC6B gene expression knockdown using RT-PCR Primer: TRAPPC6B (m)-PR: sc-154590-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.