

PPP2R3C siRNA (m): sc-152426

BACKGROUND

PPP2R3C (protein phosphatase 2, regulatory subunit B", γ), also known as serine/threonine-protein phosphatase 2A regulatory subunit B" subunit γ , G4-1, G5PR (protein phosphatase subunit G5PR) or rhabdomyosarcoma antigen MU-RMS-40.6A/6C, is a 453 amino acid protein. Existing as two alternatively spliced isoforms, PPP2R3C contains two EF-hand domains and participates in calcium ion binding. Ubiquitously expressed, PPP2R3C exhibits cell cycle-dependent localization, localizing to nucleus, but not nucleoli, and to cytoplasm during cytokinesis. PPP2R3C interacts with PP5, MCM3AP and the phosphatase 2A core enzyme, which is composed of the PPP2CA catalytic subunit and the constant regulatory subunit PPP2R1A. PPP2R3C may regulate MCM3AP phosphorylation by way of phosphatase recruitment and may play a role in the activation-induced cell death of B-cells. Highly conserved, the gene that encodes PPP2R3C maps to human chromosome 14q13.2.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Ppp2r3c (mouse) mapping to 12 C1.

PRODUCT

PPP2R3C 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 PPP2R3C shRNA Plasmid (m): sc-152426-SH and PPP2R3C shRNA (m) Lentiviral Particles: sc-152426-V as alternate gene silencing products.

For independent verification of PPP2R3C (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-152426A, sc-152426B and sc-152426C.

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

PPP2R3C siRNA (m) is recommended for the inhibition of PPP2R3C 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 PPP2R3C gene expression knockdown using RT-PCR Primer: PPP2R3C (m)-PR: sc-152426-PR (20 μl). Annealing temperature for the primers should be $55-60^{\circ}\text{C}$ and the extension temperature should be $68-72^{\circ}\text{C}$.

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.