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SANTA CRUZ BIOTECHNOLOGY, INC.

TRPC2 siRNA (m): sc-154691

BACKGROUND

TRPC2 (transient receptor potential cation channel, subfamily C, member 2), also known as trp2, Trrp2, mTrp2, TRPC2a, TRPC2b or smTRPC2, is a 1,172 amino acid multi-pass membrane protein belonging to the transient receptor STrpC subfamily and the TRPC2 sub-subfamily. TRPC2 contains three ANK repeats and exists as four alternatively spliced isoforms. TRPC2 isoform 3 is ubiquitously expressed at low levels and isoform 4 is expressed exclusively in vomeronasal organ. Thought to form a receptor-activated non-selective calcium permeant cation channel, TRPC2 is suggested to be induced by the reduction of intracellular calcium stores. TRPC2 is operated by a phosphatidylinositol second messenger system that is activated by receptor tyrosine kinases or G protein-coupled receptors.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Trpc2 (mouse) mapping to 7 E3.

PRODUCT

TRPC2 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TRPC2 shRNA Plasmid (m): sc-154691-SH and TRPC2 shRNA (m) Lentiviral Particles: sc-154691-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 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

TRPC2 siRNA (m) is recommended for the inhibition of TRPC2 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 TRPC2 gene expression knockdown using RT-PCR Primer: TRPC2 (m)-PR: sc-154691-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.