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SANTA CRUZ BIOTECHNOLOGY, INC.

ANO7 siRNA (m): sc-149952

BACKGROUND

ANO7 (anoctamin 7), also known as NGEP (new gene expressed in prostate), D-TMPP (dresden transmembrane protein of the prostate), IPCA-5, PCANAP5 (prostate cancer-associated protein 5) or TMEM16G (transmembrane protein 16G), is a 933 amino acid protein that belongs to the anoctamin family. ANO7 is expressed in prostate and is thought to function as a calcium-activated chloride channel that is upregulated in response to androgen. ANO7 undergoes alternative splicing to produce three isoforms. ANO7 isoform 1, also known as NGEP-L, is a multi-pass membrane protein found at sites of cell-to-cell contact, while isoform 2, also designated NGEP-S, localizes to cytosol. The third isoform has been designated D-TMPP. The gene encoding NGEP maps to human chromosome 2q37.3 and mouse 1 D.

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Ano7 (mouse) mapping to 1 D.

PRODUCT

ANO7 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 ANO7 shRNA Plasmid (m): sc-149952-SH and ANO7 shRNA (m) Lentiviral Particles: sc-149952-V as alternate gene silencing products.

For independent verification of ANO7 (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-149952A, sc-149952B and sc-149952C.

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

ANO7 siRNA (m) is recommended for the inhibition of ANO7 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 ANO7 gene expression knockdown using RT-PCR Primer: ANO7 (m)-PR: sc-149952-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.