SANTA CRUZ BIOTECHNOLOGY, INC.

LGI3 siRNA (m): sc-75421

BACKGROUND

The leucine-rich (LRR) repeat is a 20-30 amino acid motif that forms a hydrophobic α/β horseshoe fold, allowing it to accommodate several leucine residues within a tightly packed core. All LRR repeats contain a variable segment and a highly conserved segment, the latter of which accounts for 11 or 12 residues of the entire LRR motif. Leucine-rich glioma-inactivated protein 3 (LGI3), also known as LGI1-like protein 4 (LGIL4) or leucine-rich repeat LGI family member 3, is a 548 amino acid secretory protein. LGI3 contains five LRRs and seven EAR repeats. Widely expressed, with highest levels in brain and lung, LGI3 has been shown to colocalize with endocytosis-associated proteins, lipid raft markers, and Syntaxin. The gene encoding LGI3 maps to chromosome 8p21.3.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Lgi3 (mouse) mapping to 14 D2.

RESEARCH USE

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

PRODUCT

LGI3 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 LGI3 shRNA Plasmid (m): sc-75421-SH and LGI3 shRNA (m) Lentiviral Particles: sc-75421-V as alternate gene silencing products.

For independent verification of LGI3 (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-75421A, sc-75421B and sc-75421C.

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

LGI3 siRNA (m) is recommended for the inhibition of LGI3 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 LGI3 gene expression knockdown using RT-PCR Primer: LGI3 (m)-PR: sc-75421-PR (20 µl). 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.