SANTA CRUZ BIOTECHNOLOGY, INC.

LYPD6 siRNA (h): sc-94410

BACKGROUND

LYPD6 (LY6/PLAUR domain containing 6) is a 171 amino acid secreted protein that contains one UPAR/Ly6 domain and belongs the the Ly-6 superfamily. Members of the Ly-6 family contain a LU domain, which consists of approximately 80 amino acids and is characterized by a conserved pattern of ten cysteine residues. LYPD6 is widely expressed with high expression in heart and brain. LYPD6 is suggested to function as a modulator of nicotinic acetylcholine receptors (AChRs) by affecting receptor function through selectively increasing Ca^{2+} influx. Existing as two alternatively spliced isoforms and localizing to the cytoplasm, LYPD6 is encoded by a gene located on human chromosome 2q23.2. As the second largest human chromosome, chromosome 2 makes up approximately 8% of the human genome and contains 237 million bases encoding over 1,400 genes.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: LYPD6 (human) mapping to 2q23.2.

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.

PRODUCT

LYPD6 siRNA (h) 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 LYPD6 shRNA Plasmid (h): sc-94410-SH and LYPD6 shRNA (h) Lentiviral Particles: sc-94410-V as alternate gene silencing products.

For independent verification of LYPD6 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-94410A, sc-94410B and sc-94410C.

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

LYPD6 siRNA (h) is recommended for the inhibition of LYPD6 expression in human 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 LYPD6 gene expression knockdown using RT-PCR Primer: LYPD6 (h)-PR: sc-94410-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.