SANTA CRUZ BIOTECHNOLOGY, INC.

LURAP1 siRNA (m): sc-108247

BACKGROUND

LURAP1 (leucine rich adaptor protein 1), also known as LRP35A (leucine repeat adapter protein 35A) or LRAP35A, is a 239 amino acid cytoplasmic protein that activates the NFκB pathway and contains two LRR (leucine-rich repeats). LURAP is implicated in the production of proinflammatory cytokines and forms a tripartite complex with MRCKα, MRCKβ and Myosin XVIIIa. This complex has the ability to influence lamellar actomyosin retrograde flow, thereby effecting cell protrusion and migration. LURAP1 is encoded by a gene that maps to human chromosome 1, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome. Chromosome 1 houses a large number of disease-associated genes, including those that are involved in familial adenomatous polyposis, Stickler syndrome, Parkinson's disease, Gaucher disease and schizophrenia.

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CHROMOSOMAL LOCATION

Genetic locus: Lurap1 (mouse) mapping to 4 D1.

PRODUCT

LURAP1 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 LURAP1 shRNA Plasmid (m): sc-108247-SH and LURAP1 shRNA (m) Lentiviral Particles: sc-108247-V as alternate gene silencing products.

For independent verification of LURAP1 (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-108247A, sc-108247B and sc-108247C.

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

LURAP1 siRNA (m) is recommended for the inhibition of LURAP1 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 LURAP1 gene expression knockdown using RT-PCR Primer: LURAP1 (m)-PR: sc-108247-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.