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eIF1AD siRNA (m): sc-144610

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BACKGROUND

eIF1AD (eukaryotic translation initiation factor 1A domain containing), also known as probable RNA-binding protein EIF1AD or haponin, is a 165 amino acid protein that belongs to the eIF1AD family and contains one S1-like domain. eIF1AD localizes to nucleus and is expressed in the glioblastoma cell line U-87 MG, the embryonic kidney cell line HEK-293, the pancreatic carcinoma cell line PANC-1, the breast carcinoma cell line MCF7, the lung cancer cell line NCI-H460, and the chronic myelogenous leukemia cell line K-562. eIF1AD interacts with GAPDH and may function to reduce cell proliferation. The gene encoding eIF1AD maps to human chromosome 11q13.1. With approximately 135 million base pairs and 1,400 genes, chromosome 11 makes up around 4% of human genomic DNA and is considered a gene and disease association dense chromosome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in chromosome 11.

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PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Eif1ad (mouse) mapping to 19 A.

PRODUCT

eIF1AD 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 eIF1AD shRNA Plasmid (m): sc-144610-SH and eIF1AD shRNA (m) Lentiviral Particles: sc-144610-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

eIF1AD siRNA (m) is recommended for the inhibition of eIF1AD 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 eIF1AD gene expression knockdown using RT-PCR Primer: eIF1AD (m)-PR: sc-144610-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.