SANTA CRUZ BIOTECHNOLOGY, INC.

Iba2 siRNA (h): sc-92620

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The Power to Question

BACKGROUND

Iba2 (ionized calcium-binding adapter molecule 2), also known as AIF1L (allograft inflammatory factor 1-like), C9orf58 or UNQ672/PRO1306, is a 150 amino acid protein that contains two EF-hand domains. Localizing to the cytoplasm, Iba2 colocalizes with F-Actin and partially relocates to membrane ruffles as a result of bacterial invasion. Iba2 exists in both homodimeric and monomeric forms, and may promote actin bundling. Existing as four alternatively spliced isoforms, the gene encoding Iba2 maps to human chromosome 9q34.12 and mouse chromosome 2 B. Human chromosome 9 houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9.

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CHROMOSOMAL LOCATION

Genetic locus: AIF1L (human) mapping to 9q34.12.

PROTOCOLS

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

PRODUCT

Iba2 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 Iba2 shRNA Plasmid (h): sc-92620-SH and Iba2 shRNA (h) Lentiviral Particles: sc-92620-V as alternate gene silencing products.

For independent verification of Iba2 (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-92620A, sc-92620B and sc-92620C.

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

Iba2 siRNA (h) is recommended for the inhibition of Iba2 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 Iba2 gene expression knockdown using RT-PCR Primer: Iba2 (h)-PR: sc-92620-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.