SANTA CRUZ BIOTECHNOLOGY, INC.

APBB1IP siRNA (m): sc-141145

BACKGROUND

APBB1IP (Amyloid β (A4) precursor protein-binding, family B, member 1 interacting protein), also known as PREL1 (proline-rich EVH1 ligand 1), RARP1 (retinoic acid-responsive proline-rich protein 1) or RIAM (Rap 1-GTP-interacting adapter molecule), is a 666 amino acid protein that contains one PH domain, one Ras-associating domain and belongs to the MRL family. Encoded by a gene that maps to human chromosome 10p12.1, APBB1IP likely functions in signal transduction from Ras activation to Actin cytoskeletal remodeling. APBB1IP also suppresses Insulin-induced promoter activities, by way of SRE and AP1. The two proline-rich regions of APBB1IP are necessary for AP1 transcription suppression. Ubiquitously expressed, with high expression in thymus, spleen, lymph node, bone marrow and peripheral leukocytes, APBB1IP is induced by all-*trans*-retinoic acid (ATRA) and mediates Rap 1-induced adhesion. APBB1IP also interacts with RAP 1A, Profilin-1, VASP and Mena.

REFERENCES

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3. Morgan, A.R., et al. 2007. Association studies of 23 positional/functional candidate genes on chromosome 10 in late-onset Alzheimer's disease. Am. J. Med. Genet. B Neuropsychiatr. Genet. 144B: 762-770.
4. Radeke, M.J., et al. 2007. Disease susceptibility of the human macula: differential gene transcription in the retinal pigmented epithelium/choroid. Exp. Eye Res. 85: 366-380.
5. Yen, H.C., et al. 2008. Identification of SCF ubiquitin ligase substrates by global protein stability profiling. Science 322: 923-929.
6. Donson, A.M., et al. 2009. Immune gene and cell enrichment is associated with a good prognosis in ependymoma. J. Immunol. 183: 7428-7440.
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CHROMOSOMAL LOCATION

Genetic locus: Apbb1ip (mouse) mapping to 2 A3.

PRODUCT

APBB1IP 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 APBB1IP shRNA Plasmid (m): sc-141145-SH and APBB1IP shRNA (m) Lentiviral Particles: sc-141145-V as alternate gene silencing products.

For independent verification of APBB1IP (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-141145A, sc-141145B and sc-141145C.

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

APBB1IP siRNA (m) is recommended for the inhibition of APBB1IP 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 APBB1IP gene expression knockdown using RT-PCR Primer: APBB1IP (m)-PR: sc-141145-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.