SANTA CRUZ BIOTECHNOLOGY, INC.

FAPP2 siRNA (h): sc-89337

BACKGROUND

The members of the phosphatidylinositol kinase (PIK) superfamily can be divided into three groups based on their substrate specificity. PIKs convert phosphatidylinositol (PI) into PI phosphate [PI(3)P], PI phosphate [PI(4)P], PI bisphosphate [PI(4,5)P_2] and PI triphosphate [PI(3,4,5)P_3]. Phosphatidylinositides represent important regulatory molecules and are involved in a diverse array of signaling pathways. The phosphatidylinositol-four-phosphate adapter proteins, FAPP1, also designated Pleckstrin homology domain-containing family A member 3 (PLEKHA3), and FAPP2, also designated Pleckstrin homology domain-containing family A member 8 (PLEKHA8), interact with PI(4)P to mediate transport between the *trans*-Golgi network and plasma membrane.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PLEKHA8 (human) mapping to 7p14.3.

PROTOCOLS

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

PRODUCT

FAPP2 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 FAPP2 shRNA Plasmid (h): sc-89337-SH and FAPP2 shRNA (h) Lentiviral Particles: sc-89337-V as alternate gene silencing products.

For independent verification of FAPP2 (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-89337A, sc-89337B and sc-89337C.

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

FAPP2 siRNA (h) is recommended for the inhibition of FAPP2 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 FAPP2 gene expression knockdown using RT-PCR Primer: FAPP2 (h)-PR: sc-89337-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.