SANTA CRUZ BIOTECHNOLOGY, INC.

FAM160A2 siRNA (m): sc-108950

BACKGROUND

FAM160A2 (family with sequence similarity 160, member A2), also known as FHIP (FTS and Hook-interacting protein), is a 972 amino acid protein that forms a complex with FTS and HOOK proteins, and is known as the FTS/Hook/FHIP (FHF) complex. The FHF complex promotes vesicle trafficking and associates with the homotypic vesicular sorting (HOPS) complex. FAM160A2 belongs to the UPF0518 family and exists as three alternatively spliced isoforms that are encoded by a gene that maps to human chromosome 11p15.4. Chromosome 11 houses over 1,400 genes and comprises nearly 4% of the human genome. Jervell and Lange-Nielsen syndrome, Jacobsen syndrome, Niemann-Pick disease, hereditary angioedema and Smith-Lemli-Opitz syndrome are associated with defects in genes that maps to chromosome 11.

REFERENCES

1. Fabiani, J.E., et al. 2000. Hereditary angioedema. Long-term follow-up of 88 patients. Experience of the Argentine Allergy and Immunology Institute. Allergol. Immunopathol. 28: 267-271.
2. Jira, P.E., et al. 2003. Smith-Lemli-Opitz syndrome and the DHCR7 gene. Ann. Hum. Genet. 67: 269-280.
3. Schuchman, E.H. 2007. The pathogenesis and treatment of acid sphingomyelinase-deficient Niemann-Pick disease. J. Inherit. Metab. Dis. 30: 654-663.
4. Siem, G., et al. 2008. Jervell and Lange-Nielsen syndrome in Norwegian children: aspects around cochlear implantation, hearing, and balance. Ear Hear. 29: 261-269.
5. Xu, L., et al. 2008. An FTS/Hook/p107^{FHIP} complex interacts with and promotes endosomal clustering by the homotypic vacuolar protein sorting complex. Mol. Biol. Cell 19: 5059-5071.
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7. Coldren, C.D., et al. 2009. Chromosomal microarray mapping suggests a role for BSX and Neurogranin in neurocognitive and behavioral defects in the 11q terminal deletion disorder (Jacobsen syndrome). Neurogenetics 10: 89-95.

CHROMOSOMAL LOCATION

Genetic locus: Fam160a2 (mouse) mapping to 7 E3.

PRODUCT

FAM160A2 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. Suit-able for 50-100 transfections. Also see FAM160A2 shRNA Plasmid (m): sc-108950-SH and FAM160A2 shRNA (m) Lentiviral Particles: sc-108950-V as alternate gene silencing products.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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

FAM160A2 siRNA (m) is recommended for the inhibition of FAM160A2 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 FAM160A2 gene expression knockdown using RT-PCR Primer: FAM160A2 (m)-PR: sc-108950-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

SELECT PRODUCT CITATIONS

1. Bostanabad, S.Y., et al. 2021. Overexpression of β-Arrestins inhibits proliferation and motility in triple negative breast cancer cells. Sci. Rep. 11: 1539.

PROTOCOLS

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