SANTA CRUZ BIOTECHNOLOGY, INC.

NIPSNAP3A siRNA (m): sc-108453

BACKGROUND

NIPSNAP3A (protein NipSnap homolog 3A), also known as TassC (target for *Salmonella* secreted protein C), is a 247 amino acid cytoplasmic protein that belongs to the NipSnap family, which is a family of proteins with putative roles in vesicular transport. While highly expressed in liver, kidney and muscle, NIPSNAP3A is expressed at an intermediate level in brain, heart, colon, thymus, kidney, small intestine, placenta, lung, leukocytes and spleen. Interacting with the Salmonella typhimurium virulence protein Spi-C, NIPSNAP3A is encoded by a gene that maps to human chromosome 9q31.1. Housing over 900 genes, chromosome 9 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. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

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CHROMOSOMAL LOCATION

Genetic locus: Nipsnap3a (mouse) mapping to 4 B2.

PRODUCT

NIPSNAP3A 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 NIPSNAP3A shRNA Plasmid (m): sc-108453-SH and NIPSNAP3A shRNA (m) Lentiviral Particles: sc-108453-V as alternate gene silencing products.

For independent verification of NIPSNAP3A (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-108453A, sc-108453B and sc-108453C.

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

NIPSNAP3A siRNA (m) is recommended for the inhibition of NIPSNAP3A 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 NIPSNAP3A gene expression knockdown using RT-PCR Primer: NIPSNAP3A (m)-PR: sc-108453-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.