SANTA CRUZ BIOTECHNOLOGY, INC.

VAM1 siRNA (m): sc-76037

BACKGROUND

The MAGUK (membrane-associated guanylate kinase homologs) family of proteins contain multiple protein-binding domains and are involved in cell junction organization, tumor suppression, and signaling. The MAGUK family is divided into four subfamilies: DLG-like, ZO1-like, p55-like and LIN2-like. VAM1 (veli-associated MAGUK 1), also known as Pals2 (protein associated with Lin7 2) or MPP6 (membrane protein, palmitoylated 6), is a 540 amino acid peripheral membrane guanylate kinase that belongs to the p55-like MAGUK subfamily. Through their PDZ domains, the VAM proteins (1 and 2) bind Veli1 through an amino-terminal region and may therefore play a role in recruiting proteins at synaptic junctions in neurons. VAM1 also contains a central SH3 domain and a C-terminal guanylate kinase-like domain.

REFERENCES

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6. Rush, J., Moritz, A., Lee, K.A., Guo, A., Goss, V.L., Spek, E.J., Zhang, H., Zha, X.M., Polakiewicz, R.D. and Comb, M.J. 2005. Immunoaffinity profiling of tyrosine phosphorylation in cancer cells. Nat. Biotechnol. 23: 94-101.

CHROMOSOMAL LOCATION

Genetic locus: Mpp6 (mouse) mapping to 6 B2.3.

PRODUCT

VAM1 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 VAM1 shRNA Plasmid (m): sc-76037-SH and VAM1 shRNA (m) Lentiviral Particles: sc-76037-V as alternate gene silencing products.

For independent verification of VAM1 (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-76037A, sc-76037B and sc-76037C.

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

VAM1 siRNA (m) is recommended for the inhibition of VAM1 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 VAM1 gene expression knockdown using RT-PCR Primer: VAM1 (m)-PR: sc-76037-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

PROTOCOLS

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