



Vasorin siRNA (m): sc-61779

BACKGROUND

Vasorin (SLITL2, slit-like 2 (*Drosophila*)) is a secreted type I membrane protein that participates in vertebrate axis patterning, axon guidance, and vessel development. Vasorin contains tandem leucine-rich repeats, an EGF-like motif, and a fibronectin type III-like motif in the extracellular domain. Vasorin transcripts appear in aorta, with moderate expression in kidney and placenta. Vasorin directly binds to transforming growth factor (TGF)- β and attenuates TGF- β signaling *in vitro*. Down-regulation of vasorin expression contributes to neointimal formation after vascular injury and this mechanism modulates response to pathological stimuli in vessel walls. Subsequently, vasorin is a potential therapeutic target for vascular fibroproliferative disorders.

REFERENCES

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3. Bertolino, P., Deckers, M., Lebrin, F. and ten Dijke, P. 2005. Transforming growth factor- β signal transduction in angiogenesis and vascular disorders. *Chest* 128: 585S-590S.
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CHROMOSOMAL LOCATION

Genetic locus: Vasn (mouse) mapping to 16 A1.

PRODUCT

Vasorin 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Vasorin shRNA Plasmid (m): sc-61779-SH and Vasorin shRNA (m) Lentiviral Particles: sc-61779-V as alternate gene silencing products.

For independent verification of Vasorin (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-61779A, sc-61779B and sc-61779C.

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 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Vasorin siRNA (m) is recommended for the inhibition of Vasorin 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 μ M in 66 μ l. 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 Vasorin gene expression knockdown using RT-PCR Primer: Vasorin (m)-PR: sc-61779-PR (20 μ l). 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.