VASP siRNA – Vasodilator-Stimulated Phosphoprotein (Human)

PRODUCT OVERVIEW

Product Name	VASP, siRNA
Full Product Name	VASP siRNA (Human)
Product Gene Name	VASP sirna
Product Synonym Names	Vasodilator-stimulated phosphoprotein; VASP
Host	Synthetic
Species Reactivity	Human
Form/Format	Lyophilized powder
Purity/Purification	> 97%
Specificity	VASP siRNA (Human) is a target-specific 19-23 nt siRNA oligo duplexes designed to knock down gene expression.
Preparation and Storage	Shipped at 4 degree C. Store at -20 degree C for one year.
Molecular Weight	39,830 Da
OMIM	601703
3D Structure	ModBase 3D Structure for P50552
Negative Control	siRNA Negative Control (Catalog# MBS8241404) is a non-targeting 21 nt siRNA recommended as a negative control for experiments using targeted siRNA transfection.
Quality Control	Oligonucleotide synthesis is monitored base by base through trityl analysis to ensure appropriate coupling efficiency. The oligo is subsequently purified by affinity-solid phase extraction. The annealed RNA duplex is further analyzed by mass spectrometry to verify the exact composition of the duplex. Each lot is compared to the previous lot by mass spectrometry to ensure maximum lot-to-lot consistency.
Directions for Use	We recommends transfection with 100 nM siRNA 48 to 72 hours prior to cell lysis. Before resuspending, briefly centrifuge the tube to ensure the lyophilized siRNA is at the bottom of the tube. Resuspend the siRNA oligos to an appropriate concentration with DEPC water. For each vial, suitable for 250 transfections in 24 well plate (20 pmol for each well).
Components	We offer pre-designed sets of 3 different target-specific siRNA oligo duplexes of human VASP gene. Each vial contains 5 nmol of lyophilized siRNA. The duplexes can be transfected individually or pooled together to achieve knockdown of the target gene, which is most commonly assessed by qPCR or western blot. Our siRNA oligos are also chemically modified (2'-OMe) at no extra charge for increased stability and enhanced knockdown in vitro and in vivo.
Applications Tested/Suitable for VASP sirna	RNA Interference (RNAi)
Related Product Information for VASP sirna	MBS827472 is an siRNA targeting VASP. Also known as VASP siRNA (Human). Reactive in Human. Host: Synthetic. siRNA to inhibit VASP expression using RNA interference
Other Notes	Small volumes of VASP sirna vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for VASP. It may not necessarily be applicable to this product.

NCBI GI #	4507869
NCBI GeneID	7408
NCBI Accession #	NP_003361.1
UniProt Primary Accession #	P50552
UniProt Secondary Accession #	Q6PIZ1; Q93035; B2RBT9
UniProt Related Accession #	P50552
GenBank Nucleotide #	NM_003370.3
NCBI Official Full Name	vasodilator-stimulated phosphoprotein
NCBI Official Synonym Full Names	vasodilator-stimulated phosphoprotein
NCBI Official Symbol	VASP
UniProt Protein Name	Vasodilator-stimulated phosphoprotein
Protein Family	Protein
UniProt Gene Name	VASP
UniProt Synonym Gene Names	VASP
UniProt Entry Name	VASP_HUMAN
NCBI Protein Information	vasodilator-stimulated phosphoprotein
NCBI Summary for VASP	Vasodilator-stimulated phosphoprotein (VASP) is a member of the Ena-VASP protein family. Ena-VASP family members contain an EHV1 N-terminal domain that binds proteins containing E/DFPPPPXD/E motifs and targets Ena-VASP proteins to focal adhesions. In the mid-region of the protein, family members have a proline-rich domain that binds SH3 and WW domain-containing proteins. Their C-terminal EVH2 domain mediates tetramerization and binds both G and F actin. VASP is associated with filamentous actin formation and likely plays a widespread role in cell adhesion and motility. VASP may also be involved in the intracellular signaling pathways that regulate integrin-extracellular matrix interactions. VASP is regulated by the cyclic nucleotide-dependent kinases PKA and PKG. [provided by RefSeq, Jul 2008]
UniProt Comments for VASP	VASP: vasodilator-stimulated phosphoprotein. Actin- and profilin-binding microfilament-associated protein. The phosphorylation of VASP is dynamically regulated by cellular adhesion to extracellular matrix. Protein type: Cytoskeletal; Motility/polarity/chemotaxis Chromosomal Location of Human Ortholog: 19q13.32 Cellular Component: filopodium membrane; focal adhesion; tight junction; cytoplasm; plasma membrane; cytosol; actin cytoskeleton Molecular Function: protein binding; actin binding; SH3 domain binding; profilin binding Biological Process: axon guidance; positive regulation of actin filament polymerization; actin polymerization and/or depolymerization; neural tube closure; T cell receptor signaling pathway; protein homotetramerization
Research Articles on VASP	**1.** Ena/VASP's ability to bind F-actin and profilin-complexed G-actin are important for its effect, whereas Ena/VASP tetramerization is not necessary.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.

Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/human-sirna/vasp/827472