SANTA CRUZ BIOTECHNOLOGY, INC.

# GASP1 siRNA (m): sc-145337

## BACKGROUND

GASP-1 (G protein-coupled receptor-associated sorting protein 1), also known as GPRASP1, is a 1395 amino acid member of the GPRASP protein family. In lysosomes, GASP-1 targets receptors for degredation and may also regulate lysosomal sorting and functional down-regulation of G protein-coupled receptors. Localized to the cytoplasm, GASP-1 interacts with the cytoplasmic tails of G protein-coupled receptors, such as D2DR, D4DR, $\beta_2$-AR and DOR-1. GASP-1 has also been found to interact with Per1, a period protein that exhibits circadian rhythyms in the superchiasmatic nucleus (SCN) found in the brain. GASP-1 is expressed mainly in the brain, with lower expression in spinal chord, medulla and substantia nigra.

## REFERENCES


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## CHROMOSOMAL LOCATION

Genetic locus: Gprasp1 (mouse) mapping to X F1.

## 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.

## PRODUCT

GASP1 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 GASP1 shRNA Plasmid (m): sc-145337-SH and GASP1 shRNA (m) Lentiviral Particles: sc-145337-V as alternate gene silencing products.

For independent verification of GASP1 (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-145337A, sc-145337B and sc-145337C.

## 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

GASP1 siRNA (m) is recommended for the inhibition of GASP1 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 GASP1 gene expression knockdown using RT-PCR Primer: GASP1 (m)-PR: sc-145337-PR (20 µl). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.