



# CaBP7 siRNA (m): sc-141965

## BACKGROUND

Calcium plays an essential role in many biological processes. The calcium binding protein (CaBP) family shares much similarity with CaM I (calmodulin). It has been shown that CaBP proteins can substitute functionally for, and possibly augment the function of, CaM I. Calcium binding proteins play a crucial role in the calcium-mediated cellular signal transduction pathway in the central nervous system. There are several members of the family with varying expression patterns. CaBP7 (Calcium-binding protein 7) is a 257 amino acid protein that shares 70% homology with CaBP8 and 50% homology with CaM I. Characteristic of the CaBP protein family, CaBP7 contains two EF-hand domains for calcium binding.

## REFERENCES

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6. Ikura, M., Osawa, M. and Ames, J.B. 2002. The role of calcium-binding proteins in the control of transcription: structure to function. *Bioessays* 24: 625-636.
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## CHROMOSOMAL LOCATION

Genetic locus: *Cabp7* (mouse) mapping to 11 A1.

## PRODUCT

CaBP7 siRNA (m) is a target-specific 19-25 nt siRNA designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see CaBP7 shRNA Plasmid (m): sc-141965-SH and CaBP7 shRNA (m) Lentiviral Particles: sc-141965-V as alternate gene silencing products.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

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

## APPLICATIONS

CaBP7 siRNA (m) is recommended for the inhibition of CaBP7 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  $\mu$ M in 66  $\mu$ 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 CaBP7 gene expression knockdown using RT-PCR Primer: CaBP7 (m)-PR: sc-141965-PR (20  $\mu$ 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.