



# PRAX-1 siRNA (h): sc-94128

## BACKGROUND

PRAX-1 (peripheral benzodiazepine receptor-associated protein 1), also known as BZRAP1 (benzodiazepine receptor [peripheral] associated protein 1), RIM-BP1 or PBR-IP, is a 1,857 amino acid protein belonging to the RIMBP family. PRAX-1 contains three fibronectin type-III domains and three SH3 domains. The first SH3 domain interacts with PBR, while the third SH3 domain mediates binding to a proline-rich motif in RIM1 and RIM2. Localized to the cytoplasm, PRAX-1 is preferentially expressed in the mitochondria in the presence of PBR. Existing as three isoforms produced by alternative splicing, PRAX-1 is highly expressed in pituitary gland, brain and thymus, as well as fetal kidney, heart, brain and thymus.

## REFERENCES

1. Ishikawa, K., et al. 1998. Prediction of the coding sequences of unidentified human genes. X. The complete sequences of 100 new cDNA clones from brain which can code for large proteins *in vitro*. DNA Res. 5: 169-176.
2. Galiègue, S., et al. 1999. Cloning and characterization of PRAX-1. A new protein that specifically interacts with the peripheral benzodiazepine receptor. J. Biol. Chem. 274: 2938-2952.
3. Wang, Y., et al. 2000. The RIM/NIM family of neuronal C2 domain proteins. Interactions with Rab3 and a new class of Src homology 3 domain proteins. J. Biol. Chem. 275: 20033-20044.
4. Mittelstaedt, T. and Schoch, S. 2007. Structure and evolution of RIM-BP genes: identification of a novel family member. Gene 403: 70-79.
5. Online Mendelian Inheritance in Man, OMIM™. 2009. Johns Hopkins University, Baltimore, MD. MIM Number: 610764. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

## CHROMOSOMAL LOCATION

Genetic locus: BZRAP1 (human) mapping to 17q22.

## PRODUCT

PRAX-1 siRNA (h) 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see PRAX-1 shRNA Plasmid (h): sc-94128-SH and PRAX-1 shRNA (h) Lentiviral Particles: sc-94128-V as alternate gene silencing products.

For independent verification of PRAX-1 (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-94128A, sc-94128B and sc-94128C.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## 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

PRAX-1 siRNA (h) is recommended for the inhibition of PRAX-1 expression in human 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 PRAX-1 gene expression knockdown using RT-PCR Primer: PRAX-1 (h)-PR: sc-94128-PR (20  $\mu$ l, 546 bp). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.