SANTA CRUZ BIOTECHNOLOGY, INC.

Bzrap1 siRNA (m): sc-141795

BACKGROUND

PRAX-1 (peripheral benzodiazepine receptor-associated protein 1), also known as BZRAP1 (benzodiazapine receptor [peripheral] associated protein 1), RIM-BP1 or PBR-IP, is a 1857 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 mitochondra 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., Nagase, T., Suyama, M., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N. and Ohara, O. 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., Jbilo, O., Combes, T., Bribes, E., Carayon, P., Le Fur, G. and Casellas, P. 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., Sugita, S. and Sudhof, T.C. 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 (mouse) mapping to 11 C.

PRODUCT

Bzrap1 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 Bzrap1 shRNA Plasmid (m): sc-141795-SH and Bzrap1 shRNA (m) Lentiviral Particles: sc-141795-V as alternate gene silencing products.

For independent verification of Bzrap1 (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-141795A, sc-141795B and sc-141795C.

PROTOCOLS

See our web site at 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 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

Bzrap1 siRNA (m) is recommended for the inhibition of Bzrap1 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 Bzrap1 gene expression knockdown using RT-PCR Primer: Bzrap1 (m)-PR: sc-141795-PR (20 µl). 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.