SANTA CRUZ BIOTECHNOLOGY, INC.

# BCNP1 siRNA (m): sc-141679

## BACKGROUND

BCNP1 (B-cell novel protein 1), also known as FAM129C (family with sequence similarity 129, member C) or Niban-like protein 2, is a 697 amino acid protein that belongs to the Niban family. Specifically expressed in B-lymphocytes, BCNP1 exists as five alternatively spliced isoforms. BCNP1 is highly expressed in B-cell malignancies, lymph node and spleen, with little to no expression in other tissues, including other hemopoietic tissues. The gene encoding the BCNP1 protein maps to human chromosome 19p13.11. Consisting of around 63 million bases with over 1,400 genes, chromosome 19 makes up over 2% of human genomic DNA. Chromosome 19 includes a diversity of interesting genes and is recognized for having the greatest gene density of the human chromosomes. It is the genetic home for a number of immunoglobulin superfamily members including the killer cell and leukocyte Ig-like receptors, a number of ICAMs, the CEACAM and PSG family, and Fc$\alpha$ receptors. Key genes for eye color and hair color also map to chromosome 19.

## REFERENCES


1. Moodie, S.J., et al. 2002. Analysis of candidate genes on chromosome 19 in coeliac disease: an association study of the KIR and LILR gene clusters. Eur. J. Immunogenet. 29: 287-291.
2. Boyd, R.S., et al. 2003. Proteomic analysis of the cell-surface membrane in chronic lymphocytic leukemia: identification of two novel proteins, BCNP1 and MIG2B. Leukemia 17: 1605-1612.
3. Grimwood, J., et al. 2004. The DNA sequence and biology of human chromosome 19. Nature 428: 529-535.
4. Online Mendelian Inheritance in Man, OMIM™. 2006.Johns Hopkins University, Baltimore, MD. MIM Number: 609967. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
5. Vikelis, M., et al. 2007. A novel CADASIL-causing mutation in a stroke patient. Swiss Med. Wkly. 137: 323-325.
6. Kim, H.J., et al. 2008. Noninvasive molecular biomarkers for the detection of colorectal cancer. BMB Rep. 41: 685-692.
7. Han, M., et al. 2008. Novel blood-based, five-gene biomarker set for the detection of colorectal cancer. Clin. Cancer Res. 14: 455-460.


## CHROMOSOMAL LOCATION

Genetic locus: Fam129c (mouse) mapping to 8 B3.3.

## PRODUCT

BCNP1 siRNA (m) is a pool of 2 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 BCNP1 shRNA Plasmid (m): sc-141679-SH and BCNP1 shRNA (m) Lentiviral Particles: sc-141679-V as alternate gene silencing products.

For independent verification of BCNP1 (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-141679A and sc-141679B.

## 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

BCNP1 siRNA (m) is recommended for the inhibition of BCNP1 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 BCNP1 gene expression knockdown using RT-PCR Primer: BCNP1 (m)-PR: sc-141679-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.

## PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.