



# MNAB siRNA (h): sc-92465

## BACKGROUND

MNAB (membrane-associated nucleic acid-binding protein), also known as RC3H2 (RING finger and CCCH-type zinc finger domain-containing protein 2) or RNF164 (RING finger protein 164), is a 1,191 amino acid protein that contains one RING-type zinc finger and a C3H1-type zinc finger. Existing as six alternatively spliced isoforms, MNAB is expressed in small intestine, ovary, spleen and testis, and localizes to the perinuclear space. MNAB binds DNA and is encoded by a gene that maps to human chromosome 9, which houses over 900 genes and comprises nearly 4% of the human genome. Hereditary hemorrhagic telangiectasia, which is characterized by harmful vascular defects, and familial dysautonomia, are both associated with chromosome 9. Notably, chromosome 9 encompasses the largest interferon family gene cluster.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: RC3H2 (human) mapping to 9q33.2.

## PROTOCOLS

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

## PRODUCT

MNAB 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 MNAB shRNA Plasmid (h): sc-92465-SH and MNAB shRNA (h) Lentiviral Particles: sc-92465-V as alternate gene silencing products.

For independent verification of MNAB (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-92465A, sc-92465B and sc-92465C.

## 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

MNAB siRNA (h) is recommended for the inhibition of MNAB 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 MNAB gene expression knockdown using RT-PCR Primer: MNAB (h)-PR: sc-92465-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.