

# ABBA-1 siRNA (h): sc-93008

## BACKGROUND

ABBA-1 (Actin-bundling with BAIAP2 homology protein 1), also known as MTSS1L (metastasis suppressor 1-like), is a 747 amino acid protein that contains one WH2 domain and one IMD domain and is thought to play a role in Actin bundling. Multiple isoforms of ABBA-1 exist due to alternative splicing events. The gene encoding ABBA-1 maps to human chromosome 16. Chromosome 16, which is associated with a variety of genetic disorders, encodes over 900 genes and comprises nearly 3% of the human genome. The GAN gene is located on chromosome 16 and, with mutation, may lead to giant axonal neuropathy, a nervous system disorder characterized by increasing malfunction with growth. The rare disorder Rubinstein-Taybi syndrome is associated with chromosome 16, as is Crohn's disease, which is a gastrointestinal inflammatory condition.

## REFERENCES

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3. Coupry, I., Monnet, L., Attia, A.A., Taine, L., Lacombe, D. and Arveiler, B. 2004. Analysis of CBP (CREBBP) gene deletions in Rubinstein-Taybi syndrome patients using real-time quantitative PCR. *Hum. Mutat.* 23: 278-284.
4. Martin, J., Han, C., Gordon, L.A., Terry, A., Prabhakar, S., She, X., Xie, G., Hellsten, U., Chan, Y.M., Altherr, M., Couronne, O., Aerts, A., Bajorek, E., Black, S., Blumer, H., et al. 2004. The sequence and analysis of duplication-rich human chromosome 16. *Nature* 432: 988-994.
5. Yamagishi, A., Masuda, M., Ohki, T., Onishi, H. and Mochizuki, N. 2004. A novel Actin bundling/filopodium-forming domain conserved in Insulin receptor tyrosine kinase substrate p53 and missing in metastasis protein. *J. Biol. Chem.* 279: 14929-14936.

## CHROMOSOMAL LOCATION

Genetic locus: MTSS1L (human) mapping to 16q22.1.

## PRODUCT

ABBA-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 ABBA-1 shRNA Plasmid (h): sc-93008-SH and ABBA-1 shRNA (h) Lentiviral Particles: sc-93008-V as alternate gene silencing products.

For independent verification of ABBA-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-93008A, sc-93008B and sc-93008C.

## RESEARCH USE

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

## 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

ABBA-1 siRNA (h) is recommended for the inhibition of ABBA-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 ABBA-1 gene expression knockdown using RT-PCR Primer: ABBA-1 (h)-PR: sc-93008-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

## PROTOCOLS

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