SANTA CRUZ BIOTECHNOLOGY, INC.

# Membralin siRNA (h): sc-61018

## BACKGROUND

The gene encoding human Membralin, C19orf6, localizes to chromosome 19p13.3. It contains 11 exons, which encode at least 2 splice variants in human cancer. Membralin is a multi-pass membrane protein and exists either as a long or short form. The long form of Membralin comprises all 11 exons, while the short form contains all exons except exon 10. Expression of different Membralin isoforms depends on tissue type. The long form is expressed in ovarian and colorectal carcinomas, whereas the short form is expressed in breast or pancreatic carcinomas. Because Membralin expression in ovarian carcinomas is highest in serous carcinomas as compared to surface epithelium carcinomas, expression of Membralin may be useful as a novel tumor-associated marker in ovarian serous carcinomas.

## REFERENCES


1. Andersson, O. and von Euler, G. 2003. Characterization and expression of the gene encoding Membralin, an evolutionary conserved protein expressed in the central nervous system. Brain Res. Gene Expr. Patterns 1: 205-212.
2. Bendel, O., Meijer, B., Hurd, Y. and von Euler, G. 2005. Cloning and expression of the human NMDA receptor subunit NR3B in the adult human hippocampus. Neurosci. Lett. 377: 31-36.
3. Chen, Y.C., Davidson, B., Cheng, C.C., Maitra, A., Giuntoli, R.L., Hruban, R.H., Wang, T.L. and Shih, IeM. 2005. Identification and characterization of Membralin, a novel tumor-associated gene, in ovarian carcinoma. Biochim. Biophys. Acta 1730: 96-102.


## CHROMOSOMAL LOCATION

Genetic locus: C19orf6 (human) mapping to 19p13.3.

## PRODUCT

Membralin 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Membralin shRNA Plasmid (h): sc-61018-SH and Membralin shRNA (h) Lentiviral Particles: sc-61018-V as alternate gene silencing products.

For independent verification of Membralin (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-61018A, sc-61018B and sc-61018C.

## 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.

## RESEARCH USE

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

## APPLICATIONS

Membralin siRNA (h) is recommended for the inhibition of Membralin 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 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 Membralin gene expression knockdown using RT-PCR Primer: Membralin (h)-PR: sc-61018-PR (20 µl). 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 for detailed protocols and support products.