

# KNL2 siRNA (m): sc-141932

## BACKGROUND

C79407 (expressed sequence C79407), also known as kinetochore-associated protein KNL-2 homolog, Mis18-binding protein 1, Kiaa1903 or M18bp1, is a 998 amino acid protein that is required during CENP-A recruitment. Localizing to nucleus and centromeres, C79407 plays a role in chromosome segregation during mitosis where it associates with chromatin and centromeres in inter-phase cells. C79407 contains one SANT domain and forms a complex with OIP5, Sp1, FASP1, C14orf106, RbAp46 and RbAp48. C79407 exists as three alternatively spliced isoforms that are encoded by a gene that maps to mouse chromosome 12 C1.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: Mis18bp1 (mouse) mapping to 12 C1.

## RESEARCH USE

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

## PROTOCOLS

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

## PRODUCT

KNL2 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  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see KNL2 shRNA Plasmid (m): sc-141932-SH and KNL2 shRNA (m) Lentiviral Particles: sc-141932-V as alternate gene silencing products.

For independent verification of KNL2 (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-141932A, sc-141932B and sc-141932C.

## 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

KNL2 siRNA (m) is recommended for the inhibition of KNL2 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  $\mu$ 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 KNL2 gene expression knockdown using RT-PCR Primer: KNL2 (m)-PR: sc-141932-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.