

# DNLC2A siRNA (h): sc-77167

## BACKGROUND

DNLC2A, also known as DYNLRB1, BLP or BITH, is a 96 amino acid cytoplasmic protein that belongs to the roadblock Dynein light chain family. Highly expressed in brain, heart, liver and pancreas, with lower expression in kidney, placenta, prostate, skeletal muscle, lung and colon, DNLC2A is thought to be involved in the assembly and motor function of intermediate Dynein chains, possibly playing a role in the regulation of cell division and intracellular transport. DNLC2A is expressed as several alternatively spliced isoforms, one of which is upregulated in hepatocellular carcinoma cells, suggesting a role for DNLC2A in cell transformation and tumor progression.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: DYNLRB1 (human) mapping to 20q11.22.

## 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

DNLC2A 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 DNLC2A shRNA Plasmid (h): sc-77167-SH and DNLC2A shRNA (h) Lentiviral Particles: sc-77167-V as alternate gene silencing products.

For independent verification of DNLC2A (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-77167A, sc-77167B and sc-77167C.

## 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

DNLC2A siRNA (h) is recommended for the inhibition of DNLC2A 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 DNLC2A gene expression knockdown using RT-PCR Primer: DNLC2A (h)-PR: sc-77167-PR (20  $\mu$ l, 414 bp). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.