



# Dcun1D4 siRNA (h): sc-89241

## BACKGROUND

The DCN1-like protein family is comprised of Dcun1D1, Dcun1D2, Dcun1D3, Dcun1D4 and Dcun1D5. The founding member, Dcun1D1, is involved in the malignant transformation of squamous cell lineage. Dcun1D4, (defective in cullin neddylation protein 1-like protein 4 or DCN1-like protein 4), also designated KIAA0276, exists as two isoforms as a result of alternative splicing and contains one DCUN1 domain. The gene encoding Dcun1D4 maps to chromosome 4q12, which houses nearly 6% of the human genome and has the largest gene deserts (regions of the genome with no protein encoding genes) of all of the human chromosomes. Defects in some of the genes located on chromosome 4 are associated with Huntington's disease, Ellis-van Creveld syndrome, methylmalonic acidemia and polycystic kidney disease.

## REFERENCES

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3. Cowan, C.M. and Raymond, L.A. 2006. Selective neuronal degeneration in Huntington's disease. *Curr. Top. Dev. Biol.* 75: 25-71.
4. Liu, S., et al. 2007. Molecular cloning and expression analysis of a new gene for short-chain dehydrogenase/reductase 9. *Acta Biochim. Pol.* 54: 213-218.
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## CHROMOSOMAL LOCATION

Genetic locus: DCUN1D4 (human) mapping to 4q12.

## PRODUCT

Dcun1D4 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 Dcun1D4 shRNA Plasmid (h): sc-89241-SH and Dcun1D4 shRNA (h) Lentiviral Particles: sc-89241-V as alternate gene silencing products.

For independent verification of Dcun1D4 (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-89241A, sc-89241B and sc-89241C.

## PROTOCOLS

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

## 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

Dcun1D4 siRNA (h) is recommended for the inhibition of Dcun1D4 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 Dcun1D4 gene expression knockdown using RT-PCR Primer: Dcun1D4 (h)-PR: sc-89241-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.