



# ELMOD2 siRNA (h): sc-77263

## BACKGROUND

The Engulfment and Cell Motility (ELMO) domain is found in proteins involved in cytoskeletal rearrangements required for phagocytosis of apoptotic cells and cell motility. ELMOD2 (ELMO domain-containing protein 2) is a 293 amino acid protein that is one of six human proteins that contain an ELMO domain. ELMOD2 is thought to interact with DOCK1 through a SH3-binding site, which enhances the guanine nucleotide exchange factor (GEF) activity of DOCK1. Therefore, ELMOD2 may also be part of a complex with DOCK1 and Rac1 that is required to activate Rac Rho small GTPases. Evidence of decreased ELMOD2 expression in lung of individuals with familial idiopathic pulmonary fibrosis (IPF) suggests that defects in the gene encoding ELMOD2 may be linked to susceptibility for familial IPF.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: ELMOD2 (human) mapping to 4q31.1.

## PRODUCT

ELMOD2 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 ELMOD2 shRNA Plasmid (h): sc-77263-SH and ELMOD2 shRNA (h) Lentiviral Particles: sc-77263-V as alternate gene silencing products.

For independent verification of ELMOD2 (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-77263A, sc-77263B and sc-77263C.

## 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

ELMOD2 siRNA (h) is recommended for the inhibition of ELMOD2 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 ELMOD2 gene expression knockdown using RT-PCR Primer: ELMOD2 (h)-PR: sc-77263-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.

## PROTOCOLS

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