

## KLHL15 siRNA (m): sc-146516

### BACKGROUND

KLHL15 (kelch-like protein 15), also known as KIAA1677 or MGC126148, is a 604 amino acid protein that interacts with CUL-3. KLHL15 is believed to be a substrate-specific adapter of an E3 ubiquitin-protein ligase complex which regulates the ubiquitination, and subsequent proteasomal degradation, of target proteins. KLHL15 contains one BACK (BTB/Kelch associated) domain, five kelch repeats and one BTB domain. The BTB (broad complex, tramtrack and bric-a-brac) domain, also known as the POZ (poxvirus and zinc finger) domain, is an N-terminal homodimerization domain that contains multiple copies of kelch repeats and/or C<sub>2</sub>H<sub>2</sub>-type zinc fingers. Proteins that contain BTB domains are thought to be involved in transcriptional regulation via control of chromatin structure and function.

### REFERENCES

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5. Yoshida, K. 2005. Identification and characterization of a novel kelch-like gene KLHL15 *in silico*. *Oncol. Rep.* 13: 1133-1137.
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### CHROMOSOMAL LOCATION

Genetic locus: Klhl15 (mouse) mapping to X C3.

### PRODUCT

KLHL15 siRNA (m) is a target-specific 19-25 nt siRNA 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 KLHL15 shRNA Plasmid (m): sc-146516-SH and KLHL15 shRNA (m) Lentiviral Particles: sc-146516-V as alternate gene silencing products.

### 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

KLHL15 siRNA (m) is recommended for the inhibition of KLHL15 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 KLHL15 gene expression knockdown using RT-PCR Primer: KLHL15 (m)-PR: sc-146516-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.