

# FBXO18 siRNA (h): sc-90469

## BACKGROUND

FBXO18 (F-box only protein 18, F-box DNA helicase 1) is a 1,043 amino acid protein encoded by the human gene FBXO18. FBXO18 belongs to the helicase family (UvrD subfamily) and contains one F-box domain. This nuclear protein is a DNA-dependent ATPase that unwinds double-stranded DNA in a 3' to 5' direction. FBXO18 also recognizes and binds to a variety of phosphorylated proteins and promotes their ubiquitination and degradation. It also interacts with Skp1 in the SCF E3 ubiquitin ligase complex consisting of Skp1, CUL-1, Rbx1 and FBXO18.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: FBXO18 (human) mapping to 10p15.1.

## PRODUCT

FBXO18 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 FBXO18 shRNA Plasmid (h): sc-90469-SH and FBXO18 shRNA (h) Lentiviral Particles: sc-90469-V as alternate gene silencing products.

For independent verification of FBXO18 (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-90469A, sc-90469B and sc-90469C.

## 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

FBXO18 siRNA (h) is recommended for the inhibition of FBXO18 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.

## GENE EXPRESSION MONITORING

FBXO18 (2353C1a): sc-81563 is recommended as a control antibody for monitoring of FBXO18 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor FBXO18 gene expression knockdown using RT-PCR Primer: FBXO18 (h)-PR: sc-90469-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

## SELECT PRODUCT CITATIONS

- Zhu, C., Wase, M., Li, Z., Wang, F., Quinet, A., Vindigni, A. and Shao, J. 2022. Profilin-1 regulates DNA replication forks in a context-dependent fashion by interacting with SNF2H and BOD1L. *Nat. Commun.* 13: 6531.

## 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.