



## FBL15 siRNA (h): sc-90624

### BACKGROUND

F-box proteins are critical components of the SCF (Skp1-CUL-1-F-box protein) type E3 ubiquitin ligase complex and are involved in substrate recognition and recruitment for ubiquitination. They are members of a larger family of proteins that are involved in the regulation of a wide variety of cellular processes (including the cell cycle, immune responses, signaling cascades and developmental events) through the targeting of proteins, such as cyclins, cyclin-dependent kinase inhibitors, I $\kappa$ B- $\alpha$  and  $\beta$ -catenin, for proteasomal degradation. FBL15 (F-box and leucine-rich repeat protein 15), also known as FBXL15, FBX037, PSD or JET, is a 296 amino acid protein that contains one F-box domain and functions as a component of the SCF complex, possibly playing a role in the ubiquitination and subsequent degradation of target proteins.

### REFERENCES

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3. Winston, J.T., Koepp, D.M., Zhu, C., Elledge, S.J. and Harper, J.W. 1999. A family of mammalian F-box proteins. *Curr. Biol.* 9: 1180-1182.
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5. Kipreos, E.T. and Pagano, M. 2000. The F-box protein family. *Genome Biol.* 1: REVIEWS3002.
6. Koh, K., Zheng, X. and Sehgal, A. 2006. JETLAG resets the *Drosophila* circadian clock by promoting light-induced degradation of TIMELESS. *Science* 312: 1809-1812.
7. Online Mendelian Inheritance in Man, OMIM™. 2006. Johns Hopkins University, Baltimore, MD. MIM Number: 610287. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>

### CHROMOSOMAL LOCATION

Genetic locus: FBXL15 (human) mapping to 10q24.32.

### PRODUCT

FBL15 siRNA (h) 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 FBL15 shRNA Plasmid (h): sc-90624-SH and FBL15 shRNA (h) Lentiviral Particles: sc-90624-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

FBL15 siRNA (h) is recommended for the inhibition of FBL15 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 FBL15 gene expression knockdown using RT-PCR Primer: FBL15 (h)-PR: sc-90624-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.