## SignalSilence® Bcl-xL siRNA I

10 μM in 300 μl
 (100 transfections)

rev. 02/10/16



## Species Cross-Reactivity: H

**Description:** SignalSilence<sup>®</sup> Bcl-xL siRNA I from Cell Signaling Technology (CST) allows the researcher to specifically inhibit Bcl-xL expression using RNA interference, a method whereby gene expression can be selectively silenced through the delivery of double stranded RNA molecules into the cell. All SignalSilence<sup>®</sup> siRNA products from CST are rigorously tested in-house and have been shown to reduce target protein expression by western analysis.

**Background:** Bcl-xL prevents apoptosis through two different mechanisms: heterodimerization with an apoptotic protein inhibits its apoptotic effect (1,2) and formation of mitochondrial outer membrane pores help maintain a normal membrane state under stressful conditions (3). Bcl-xL is phosphorylated by JNK following treatment with microtubule-damaging agents such as paclitaxel, vinblastine and nocodazole (4,5).

**Directions for Use:** CST recommends transfection with 100 nM Bcl-xL siRNA I 48 to 72 hours prior to cell lysis. For transfection procedure, follow protocol provided by the transfection reagent manufacturer. Please feel free to contact CST with any questions on use.

**Quality Control:** Oligonucleotide synthesis is monitored base by base through trityl analysis to ensure appropriate coupling efficiency. The oligo is subsequently purified by affinity-solid phase extraction. The annealed RNA duplex is further analyzed by mass spectrometry to verify the exact composition of the duplex. Each lot is compared to the previous lot by mass spectrometry to ensure maximum lot-to-lot consistency.



Western blot analysis of extracts from HeLa cells, transfected with 100 nM SignalSilence® Control siRNA (Unconjugated) #6568 (-), SignalSilence® BcL-xL siRNA I (+) or SignalSilence® Bcl-xL siRNA II #6363 (+), using Bcl-xL (54H6) Rabbit mAb #2764 (upper) or  $\alpha$ -Tubulin (11H10) Rabbit mAb #2125 (lower). The Bcl-xL (54H6) Rabbit mAb confirms silencing of Bcl-xL expression, while the  $\alpha$ -Tubulin (11H10) Rabbit mAb is used as a loading control.



**Storage:** Bcl-xL siRNA I is supplied in RNAse-free water. *Aliquot and store at -20°C.* 

Cell Signaling

Orders 877-616-CELL (2355)

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## Please visit www.cellsignal.com for a complete listing of recommended companion products.

## **Background References:**

- (1) Adams, J.M. and Cory, S. (1998) Science 281, 1322-1326.
- (2) Minn, A.J. et al. (1999) EMBO. J. 18, 632-643.
- (3) Vander Heiden, M.G. et al. (2001) *J. Biol. Chem.* 276, 19414-19419.
- (4) Fan, M. et al. (2000) J. Biol. Chem. 275, 29980-29985
- (5) Poruchynsky, M.S. et al. (1998) Cancer Res. 58, 3331-3338.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse AII—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.