## SignalSilence® Bax siRNA II

10 μM in 300 μl
 (100 Transfections)

rev. 02/11/16



## Species Cross-Reactivity: H, M, R

**Description:** SignalSilence<sup>®</sup> Bax siRNA II from Cell Signaling Technology (CST) allows the researcher to specifically inhibit Bax 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 protein expression by western analysis.

**Background:** Bax is a key component for cellular induced apoptosis through mitochondrial stress (1). Upon apoptotic stimulation, Bax forms oligomers and translocates from the cytosol to the mitochondrial membrane (2). Through interactions with pore proteins on the mitochondrial membrane, Bax increases the membrane's permeability, which leads to the release of cytochrome c from mitochondria, activation of caspase-9 and initiation of the caspase activation pathway for apoptosis (3,4).

**Directions for Use:** CST recommends transfection with 100 nM Bax siRNA II 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 (Fluorescein Conjugate) #6201 (-), SignalSilence® Bax siRNA I #6321 (+), or SignalSilence® Bax siRNA II (+), using Bax Antibody #2772 and  $\alpha$ -Tubulin (11H10) Rabbit mAb #2125. The Bax Antibody confirms silencing of Bax expression and  $\alpha$ -Tubulin (11H10) Rabbit mAb is used to control for loading and specificity of Bax siRNA.

## Entrez-Gene ID #581 Swiss-Prot Acc. #Q07812

**Storage:** Bax siRNA II is supplied in RNAse-free water. Aliquot and store at -20°C.

Please visit www.cellsignal.com for a complete listing of recommended companion products. Bax Antibody #2772

## **Background References:**

(1) Wei, M.C. et al. (2001) Science 292, 727-730.

Cell Signaling

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- (2) Jurgensmeier, J.M. et al. (1998) *Proc. Natl. Acad. Sci. USA* 95, 4997–5002.
- (3) Narita, M. et al. (1998) *Proc. Natl. Acad. Sci. USA* 95, 14681–14686.
- (4) Marzo, I. et al. (1998) Science 281, 2027-2031.