

# SignalSilence® PEA-15 siRNA I



✓ 10 µM in 300 µl  
(100 transfections)

**Orders** ■ 877-616-CELL (2355)  
 orders@cellsignal.com  
**Support** ■ 877-678-TECH (8324)  
 info@cellsignal.com  
**Web** ■ www.cellsignal.com

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**For Research Use Only. Not For Use In Diagnostic Procedures.**

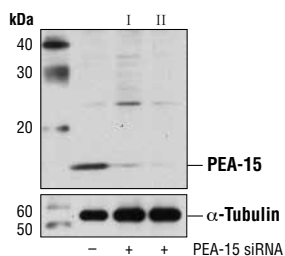
## Species Cross-Reactivity: H

**Description:** SignalSilence® PEA-15 siRNA I from Cell Signaling Technology (CST) allows the researcher to specifically inhibit PEA-15 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® siRNA products from CST are rigorously tested in-house and have been shown to reduce target protein expression by western analysis.

**Background:** PEA-15 is a 15 kDa phosphoprotein expressed abundantly in astrocytes and fibroblasts as well as in tissues, including the lung and eye (1). The protein has been shown to coordinate cell growth, death, and glucose utilization (2-4). The amino-terminal DED domain of PEA-15 mediates its binding to FADD or Erk and further regulates the Erk and apoptosis signaling pathways. PEA-15 can be phosphorylated at two serine residues, Ser104 and Ser116, located within the carboxy terminus. Phosphorylation at these sites regulates binding to Erk and FADD (2,3).

**Directions for Use:** CST recommends transfection with 100 nM SignalSilence® PEA-15 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® PEA-15 siRNA I (+), or SignalSilence® PEA-15 siRNA II #7865 (+), using PEA-15 Antibody #2780 (upper) or  $\alpha$ -Tubulin (11H10) Rabbit mAb #2125 (lower). The PEA-15 Antibody confirms silencing of PEA-15 expression, while the  $\alpha$ -Tubulin (11H10) Rabbit mAb is used as a loading control.

**Entrez-Gene ID** #8682  
**UniProt Acc.** #Q15121

**Storage:** PEA-15 siRNA I is supplied in RNase-free water. Aliquot and store at -20°C.

**Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended companion products.**

## Background References:

- (1) Danziger, N. et al. (1995) *J. Neurochem.* 64, 1016-1025.
- (2) Krueger, J. et al. (2005) *Mol. Biol. Cell* 16, 3552-3561.
- (3) Renganathan, H. et al. (2005) *Biochem. J.* 390, 729-735.
- (4) Condorelli, G. et al. (1998) *EMBO J.* 17, 3858-3866.