

# SignalSilence® MAML1 siRNA I



✓ 10 µM in 300 µl (3 nmol)

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

### Species Cross-Reactivity: H, (Mk)

**Description:** SignalSilence® MAML1 siRNA I from Cell Signaling Technology (CST) allows the researcher to specifically inhibit MAML1 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.

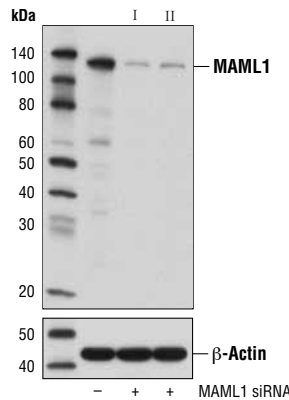
**Background:** Mastermind-like (MAML) family of proteins are homologs of *Drosophila* Mastermind. The family is composed of three members in mammals: MAML1, MAML2, and MAML3 (1,2). MAML proteins form complexes with the intracellular domain of Notch (ICN) and the transcription factor CSL (RBP-Jκ) to regulate Notch target gene expression (3-5). MAML1 also interacts with myocyte enhancer factor 2C (MEF2C) to regulate myogenesis (6). MAML2 is frequently found to be fused with Mucoepidermoid carcinoma translocated gene 1 (MECT1, also known as WAMTP1 or TORC1) in patients with mucoepidermoid carcinomas and Warthin's tumors (7).

**Specificity/Sensitivity:** SignalSilence® MAML1 siRNA I inhibits human and monkey MAML1 expression.

**Directions for Use:** CST recommends transfection with 100 nM SignalSilence® MAML1 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.

Each vial contains the equivalent of 100 transfections, which corresponds to a final siRNA concentration of 100 nM per transfection in a 24-well plate with a total volume of 300 µl per well.

**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 293T cells, transfected with 100 nM SignalSilence® Control siRNA (Unconjugated) #6568 (-), SignalSilence® MAML1 siRNA I (+), or SignalSilence® MAML1 siRNA II #12440 (+), using MAML1 Antibody #4608 (upper) or β-Actin (D6A8) Rabbit mAb #8457 (lower). The MAML1 Antibody confirms silencing of MAML1 expression, while the β-Actin (D6A8) Rabbit mAb is used as a loading control.

Entrez-Gene ID #9794  
Swiss-Prot Acc. #Q92585

**Storage:** MAML1 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) Wu, L. et al. (2002) *Mol. Cell Biol.* 22, 7688-7700.
- (2) Lin, S.E. et al. (2002) *J. Biol. Chem.* 277, 50612-50620.
- (3) Kitagawa, M. et al. (2001) *Mol. Cell Biol.* 21, 4337-4346.
- (4) Nam, Y. et al. (2003) *J. Biol. Chem.* 278, 21232-21239.
- (5) Nam, Y. et al. (2006) *Cell* 124, 973-983.
- (6) Shen, H. et al. (2006) *Genes Dev.* 20, 675-688.
- (7) Tonon, G. et al. (2003) *Nat. Genet.* 33, 208-213.