SignalSilence® ADRM1 siRNA II

#8536 Store at -20°C

☑ 10 µM in 300 µl (3 nmol)

Cell Signaling TECHNOLOGY®

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

rev. 03/04/16

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

Species Cross-Reactivity: H, (Mk)

Description: SignalSilence® ADRM1 siRNA II from Cell Signaling Technology (CST) allows the researcher to specifically inhibit ADRM1 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.

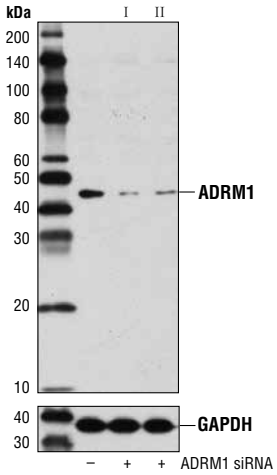
Background: Currently, there are five ubiquitin receptors associated with the proteasome: two proteasome subunits, Rpn10/S5a/PSMD4 and Rpn13/ADRM1 (Adhesion-regulating molecule 1), and three families of shuttling factors, Rad23, Dsk2, and Ddi1. ADRM1 is a ubiquitin receptor of the proteasome (1,2) that binds ubiquitin via a pleckstrin homology domain known as the pleckstrin-like receptor for ubiquitin (Pru) domain. The carboxy-terminal domain of mammalian ADRM1 serves to bind and enhance the isopeptidase activity of UCHL5/UCH37 (3-5), perhaps serving as a mechanism to accelerate ubiquitin chain disassembly. A murine *Adrm1* knockout results in defective gametogenesis, thus highlighting a physiologic role for endogenous ADRM1 in mammalian development (6).

Specificity/Sensitivity: SignalSilence® ADRM1 siRNA II inhibits human and monkey ADRM1 expression.

Directions for Use: CST recommends transfection with 100 nM SignalSilence® ADRM1 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.

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® ADRM1 siRNA I #7981 (+), or SignalSilence® ADRM1 siRNA II (+), using ADRM1 Antibody #8549 (upper) or GAPDH (D16H11) XP® Rabbit mAb #5174 (lower). The ADRM1 Antibody confirms silencing of ADRM1 expression, while the GAPDH (D16H11) XP® Rabbit mAb is used as a loading control.

Entrez-Gene ID #11047
Swiss-Prot Acc. #Q16186

Storage: ADRM1 siRNA II is supplied in RNAse-free water. *Aliquot and store at -20ºC.*

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

Background References:

(1) Schreiner, P. et al. (2008) *Nature* 453, 548-52.

(2) Husnjak, K. et al. (2008) *Nature* 453, 481-8.

(3) Yao, T. et al. (2006) *Nat Cell Biol* 8, 994-1002.

(4) Hamazaki, J. et al. (2006) *EMBO J* 25, 4524-36.

(5) Qiu, X.B. et al. (2006) *EMBO J* 25, 5742-53.

(6) Al-Shami, A. et al. (2010) *PLoS One* 5, e13654.

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 **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.