Store at -20°C

#15157

SignalSilence® TRIM27 siRNA I

www.cellsignal.com

Support: 877-678-TECH (8324)
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New 04/15

Entrez-Gene ID #5987
UniProt ID #P14373

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

Species Cross-Reactivity: H

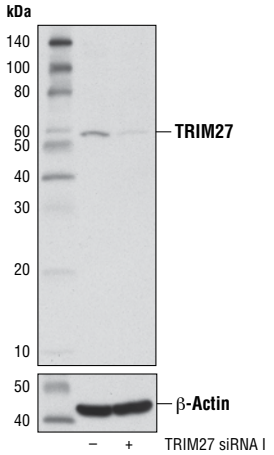
Description: SignalSilence® TRIM27 siRNA I from Cell Signaling Technology (CST) allows the researcher to specifically inhibit TRIM27 expression using RNA interference, a method whereby gene expression can be selectively silenced through the delivery of double stranded RNA molecules into the cell. All SignalSilence® siRNA products from CST are rigorously tested in-house and have been shown to reduce target protein expression by western analysis.

Background: Tripartite motif containing protein 27 (TRIM27, RFP) is a member of the tripartite motif (TRIM) family whose members contain a RING domain, a B-box, and a coiled-coil region (together called RBCC). TRIM27 was originally discovered as part of an oncogenic DNA rearrangement resulting in a fusion of the amino terminal RBCC region of TRIM27 with the carboxyl terminal kinase domain of the receptor tyrosine kinase Ret (1). Overexpression of TRIM27 induces JNK and p38 MAPK activation as well as apoptosis (2). TRIM27 has been found to have pleiotropic effects including transcriptional repression (3,4), and E3 ligase activity for ubiquitin (5-7), and SUMO (8). TRIM27 was originally found to interact with Enhancer of Polycomb (EPC) and function as a transcriptional repressor (3). Subsequent studies have identified ubiquitin E3 ligase activity in TRIM27 as well as other members of the TRIM family (reviewed in 9). Potential substrates of TRIM27 mediated ubiquitination include class II PI3K-C2β, NOD2, and WASH. Elevated expression of TRIM27 has been observed in several types of cancer, where in some cases it may be a predictor of poor prognosis (10-13).

Directions for Use: CST recommends transfection with 100 nM SignalSilence® TRIM27 siRNA I 48 to 72 hours prior to cell lysis. For transfection procedure, follow the 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 MCF7 cells transfected with 100 nM SignalSilence® Control siRNA (Unconjugated) #6568 (-) or SignalSilence® TRIM27 siRNA I (+), using TRIM27 (D5S4O) Rabbit mAb #15099 (upper) and β-Actin (D6A8) Rabbit mAb #8457 (lower). The TRIM27 (D5S4O) Rabbit mAb confirms silencing of TRIM27 expression, while the β-Actin (D6A8) Rabbit mAb is used as a loading control.

Storage: TRIM27 siRNA I is supplied in RNase-free water. *Aliquot and store at -20°C.*

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com

Background References:

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Cell Signaling TECHNOLOGY®

Applications: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide **Species Cross-Reactivity:** **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.