

#6520 Store at -20°C

SignalSilence® Caspase-3 siRNA II



✓ 10 µM in 300 µl (100 Transfections)

Orders ■ 877-616-CELL (2355) orders@cellsignal.com
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For Research Use Only. Not For Use In Diagnostic Procedures.

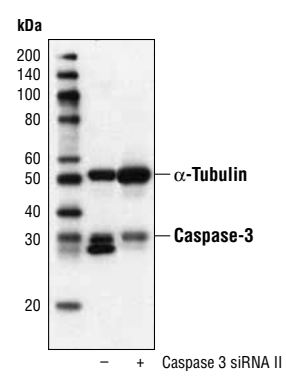
Species Cross-Reactivity: H, M, R

Description: SignalSilence® Caspase-3 siRNA II allows the researcher to specifically inhibit caspase-3 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 are rigorously tested in-house and have been shown to reduce target protein expression by western analysis.

Background: Caspase-3 (CPP-32, Apoptain, Yama, SCA-1) is a critical executioner of apoptosis, as it is either partially or totally responsible for the proteolytic cleavage of many key proteins such as the nuclear enzyme poly (ADP-ribose) polymerase (PARP) (1). Activation of caspase-3 requires proteolytic processing of its inactive zymogen into activated p17 and p12 fragments. Cleavage of caspase-3 requires aspartic acid at the P1 position (2).

Directions for Use: CST recommends transfection with 100 nM Caspase-3 siRNA 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 (-) or SignalSilence® Caspase-3 siRNA II (+), using Caspase-3 (8G10) Rabbit mAb #9665 and α-Tubulin (11H10) Rabbit mAb #2125. Caspase-3 (8G10) Rabbit mAb confirms silencing of caspase-3 expression, while the α-Tubulin (11H10) Rabbit mAb is used to control for loading and specificity of caspase-3 siRNA.

Entrez-Gene ID #836
Swiss-Prot Acc. #P42574

Storage: Caspase-3 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.

- Background References:**
- (1) Fernandes-Alnemri, T. et al. (1994) *J. Biol. Chem.* 269, 30761–30764.
 - (2) Nicholson, D. W. et al. (1995) *Nature* 376, 37–43.

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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.