

#8966 Store at -20°C

SignalSilence® Aldolase A siRNA I



✓ 10 µM in 300 µl (100 Transfections)

Orders ■ 877-616-CELL (2355) orders@cellsignal.com
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Web ■ www.cellsignal.com

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

Species Cross-Reactivity: H

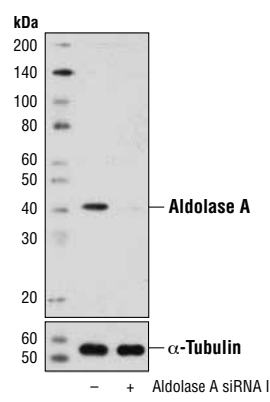
Description: SignalSilence® Aldolase A siRNA I from Cell Signaling Technology (CST) allows the researcher to specifically inhibit aldolase A expression using RNA interference, a method whereby gene expression can be selectively silenced through the delivery of double stranded RNA molecules into the cell.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

Background: Aldolase (fructose biphosphate aldolase), a glycolytic enzyme, catalyzes the conversion of fructose 1, 6-biphosphate to 3-phosphoglyceraldehyde. This ubiquitous enzyme is present as three different isozymes: aldolase A, aldolase B, and aldolase C. Studies suggest the potential diagnostic value of quantitative analysis of aldolase A for hepatocarcinoma (1). Furthermore, the change in aldolase B gene expression levels has also been observed in certain patients with this primary tumor (2,3).

Specificity/Sensitivity: SignalSilence® Aldolase A siRNA I does not inhibit aldolase B or C expression.

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.

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



Western blot analysis of extracts from HeLa cells, transfected with 100 nM SignalSilence® Control siRNA (Unconjugated) #6568 (-) or SignalSilence® Aldolase A siRNA I (+), using Aldolase Antibody #3188 and α-Tubulin (11H10) Rabbit mAb #2125. The Aldolase Antibody confirms silencing of aldolase A expression, while the α-Tubulin (11H10) Rabbit mAb is used as a loading control.

Entrez-Gene ID #226
Swiss-Prot Acc. #P04075

Storage: Aldolase A siRNA I 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) Castaldo, G. et al. (2000) *Clin. Chem.* 46, 901-906.
- (2) Kinoshita, M. and Miyata, M. (2002) *Hepatology* 36, 433-438.
- (3) Song, H. et al. (2004) *World J. Gastroenterol* 10, 509-513.

Rabbit monoclonal antibody is produced under license (granting certain rights including those under U. S. Patents No. 5,675,063 and 7,429,487) from Eptomics, Inc.

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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.