

Catalog #	Aliquot Size
Y92-911-05	3 x 5 nmol
Y92-911-20	3 x 20 nmol
Y92-911-50	3 x 50 nmol

## 14-3-3 zeta siRNA Set I

siRNA duplexes targeted against three exon regions

### Catalog # Y92-911

Lot # Z2013-3

### Specificity

14-3-3 zeta siRNAs are designed to specifically knock-down human 14-3-3 zeta expression.

### Product Description

14-3-3 zeta siRNA is a pool of three individual synthetic siRNA duplexes designed to knock-down human 14-3-3 zeta mRNA expression. Each siRNA is 19-25 bases in length. The gene accession number is [NM\\_003406](#).

### Gene Aliases

14-3-3 zeta, YWHAZ, KCIP-1, MGC111427, MGC126532, MGC138156

### Storage and Stability

The lyophilized powder is stable for at least 4 weeks at room temperature. It is recommended that the lyophilized and resuspended siRNAs are stored at or below -20°C. After resuspension, siRNA stock solutions  $\geq 2$   $\mu$ M can undergo up to 50 freeze-thaw cycles without significant degradation. For long-term storage, it is recommended that the siRNA is stored at -70°C. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

### Scientific Background

14-3-3 $\square$  (also known as tyrosine 3-monooxygenase / tryptophan 5-monooxygenase activation protein, zeta polypeptide) is a member of the 14-3-3 family of proteins which mediate signal transduction by binding to phosphoserine-containing proteins. 14-3-3 $\square$  protein plays a key role in cancer biology by being an important regulator of major cellular processes such as proliferation, differentiation, senescence and apoptosis (1). 14-3-3 $\square$  protein has been shown to interact with the IRS1 protein, suggesting a role for this protein in regulating insulin sensitivity by interrupting the association between the insulin receptor and IRS1 (2).

### References

1. Li, Z. et al: Down-regulation of 14-3-3zeta suppresses anchorage-independent growth of lung cancer cells through anoikis activation. Proc Natl Acad Sci U S A. 2008; 105(1):162-7.
2. Niemantsverdriet, M. et al: Cellular functions of 14-3-3 zeta in apoptosis and cell adhesion emphasize its oncogenic character. Oncogene. 2008;27(9):1315-9. 2007.

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### Formulation

The siRNAs are supplied as a lyophilized powder and shipped at room temperature.

### Reconstitution Protocol

Briefly centrifuge the tubes (maximum RCF 4,000g) to collect lyophilized siRNA at the bottom of the tube. Resuspend the siRNA in 50  $\mu$ l of DEPC-treated water (supplied by researcher), which results in a 1x stock solution (10  $\mu$ M). Gently pipet the solution 3-5 times to mix and avoid the introduction of bubbles. Optional: aliquot 1x stock solutions for storage.

### Related Products

Product Name	Catalog Number
14-3-3 zeta Protein	Y92-30G
14-3-3 zeta Protein	Y92-30N

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siRNA duplexes targeted against three exon regions

Catalog Number	Y92-911
Specific Lot Number	Z2013-3
Packaging Specifications	2.5 nmol/tube for 3 x 5 nmol
Format	Lyophilized powder
Stability	1yr at -70°C from date of shipment
Storage & Shipping	The lyophilized powder is stable for at least 4 weeks at room temperature. It is recommended that the lyophilized and resuspended siRNAs are stored at or below -20°C. After resuspension, siRNA stock solutions $\geq 2$ $\mu$ M can undergo up to 50 freeze-thaw cycles without significant degradation. For long-term storage, it is recommended that the siRNA is stored at -70°C. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.