

Catalog #	Aliquot Size
A03-911B-05	3 x 5 nmol
A03-911B-20	3 x 20 nmol
A03-911B-50	3 x 50 nmol

alpha 1-Actin siRNA Set I

siRNA duplexes targeted against three exon regions

Catalog # A03-911B

Lot # Z2013-31

Specificity

alpha 1-Actin siRNAs are designed to specifically knock-down human alpha 1-Actin expression.

Product Description

alpha 1-Actin siRNA is a pool of three individual synthetic siRNA duplexes designed to knock-down human alpha 1-Actin mRNA expression. Each siRNA is 19-25 bases in length. The gene accession number is [NM_001100](#).

Gene Aliases

ACTA1; ACTA; ASMA; CFTD; CFTD1; CFTDM; MPFD; NEM1; NEM2; NEM3

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 ≥ 2 μ 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

Actin is an abundant cytoskeletal protein that is found in virtually all eukaryotic cells. At least six isoforms of actin have been identified in mammals. Because it is one of the most highly-conserved proteins, it is an excellent loading control for protein analyses. Actin is the monomeric subunit of microfilaments, one of the three major components of the cytoskeleton, and of thin filaments, which are part of the contractile apparatus in muscle cells. Thus, actin participates in many important cellular functions, including muscle contraction, cell motility, cell division and cytokinesis, vesicle and organelle movement, cell signaling, and the establishment and maintenance of cell junctions and cell shape (1).

References

1. Lessard, J L.: Two monoclonal antibodies to actin: one muscle selective and one generally reactive. *Cell Motility and Cytoskeleton* 1998 10:349-362.

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 μ l of DEPC-treated water (supplied by researcher), which results in a 1x stock solution (10 μ 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
Anti-alpha 1-Actin	A03-360M

alpha 1-Actin siRNA Set I

siRNA duplexes targeted against three exon regions

Catalog Number	A03-911B
Specific Lot Number	Z2013-31
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 ≥ 2 μ 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.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: orders@signalchem.com
www.signalchem.com

FOR IN VITRO RESEARCH PURPOSES ONLY. NOT INTENDED FOR USE IN HUMAN OR ANIMALS.