

beta-Actin Positive Control siRNA

siRNA duplex targeted against beta-Actin

Catalog # A03-911D

Lot # Z2207-1

Specificity

beta-Actin Positive Control siRNA is designed to specifically knock-down human beta-Actin expression.

Product Description

beta-Actin Positive Control siRNA is a synthetic siRNA duplex designed to knock-down human beta-Actin mRNA expression. The synthetic siRNAs (5'-UGA AGA UCA AGA UCA UUG CdTdT-3' and 5'-GCA AUG AUC UUG AUC UUC AdTdT-3') enable qualitative assessment of knockdown and for optimizing RNAi experiments.

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, a ubiquitous protein in eukaryotes, is the major component of the cytoskeleton. At least six isoforms are known in mammals. Nonmuscle β - and γ -actin, also known as cytoplasmic actin, are predominantly expressed in nonmuscle cells, controlling cell structure and motility (1). α -cardiac and α -skeletal actin are expressed in striated cardiac and skeletal muscles, respectively; two smooth muscle actins, α - and γ -actin, are found primarily in vascular smooth muscle and enteric smooth muscle, respectively. These actin isoforms regulate contractile potentials for muscle cells (1).

References

1. Herman, I.M. (1993) *Curr. Opin. Cell Biol.* 5, 48–55.

Formulation

The siRNAs are supplied as a lyophilized powder and shipped at room temperature. Package Specifications: 2.5 nmol/tube.

Reconstitution Protocol

Briefly centrifuge the tubes (maximum RCF 4,000g) to collect lyophilized siRNA at the bottom of the tube. Resuspend the siRNA in 25 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.

Purity

Single PAGE band

Related Products

Product Name	Catalog Number
Anti-beta-Actin	A03-63BR
Anti-beta-Actin	A03-60BM

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Lot #	Z2207-1
Format	Lyophilized powder
Stability	1 yr 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.