

# TAF7L siRNA (h): sc-90911

## BACKGROUND

In eukaryotic systems, initiation of transcription from protein-coding genes is a complex process requiring RNA polymerase II and broad families of auxiliary transcription factors. One class of these factors is TFIID (transcription factor II D), a multimeric protein complex that mediates promoter responses to various activators and repressors. TAF7L (transcription initiation factor TFIID subunit 7-like), also known as transcription initiation factor TFIID 50 kDa subunit and RNA polymerase II TBP-associated factor subunit Q, is a 462 amino acid testis-specific protein that is a component of TFIID. TAF7L replaces TAF7 in the spermatogenesis-specific form of TFIID, where it interacts with TAF1 and TATA-binding protein. In spermatogonia and early spermatocytes TAF7L is located within the cytoplasm, though it is localized to the nucleus in spermatocytes and round spermatids. There are three isoforms of TAF7L that are produced as a result of alternative splicing events.

## REFERENCES

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## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.

## CHROMOSOMAL LOCATION

Genetic locus: TAF7L (human) mapping to Xq22.1.

## PRODUCT

TAF7L siRNA (h) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10  $\mu$ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TAF7L shRNA Plasmid (h): sc-90911-SH and TAF7L shRNA (h) Lentiviral Particles: sc-90911-V as alternate gene silencing products.

For independent verification of TAF7L (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-90911A, sc-90911B and sc-90911C.

## STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNases and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330  $\mu$ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330  $\mu$ l of RNase-free water makes a 10  $\mu$ M solution in a 10  $\mu$ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

TAF7L siRNA (h) is recommended for the inhibition of TAF7L expression in human cells.

## SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10  $\mu$ M in 66  $\mu$ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor TAF7L gene expression knockdown using RT-PCR Primer: TAF7L (h)-PR: sc-90911-PR (20  $\mu$ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.