



# TAF II p70 siRNA (h): sc-89790

## BACKGROUND

TFIID is a general transcription factor that facilitates the preinitiation complex assembly through direct interactions with the TATA promoter element. TFIID is a multisubunit complex consisting of a small TATA-binding polypeptide and other TBP-associated factors (TAFs). The TAF II family members include p18, p20, p28, p30, p31, p32, p70, p100, p105, p130, p170 and p250, which is the largest subunit of TFIID. TAF II p70 (TATA-binding protein (TBP) associated factor II70), also known as TAF6, TAF2E, TAFII70, TAFII80 or TAFII85, is a member of the basal transcription complex. TAF II p70 directly interacts with TAF II p31, TAF II p20 and TAF II p250. It forms a heterodimer with TAF II p31 and may function as a p53 coactivator. The TAF II p70/TAF II p31 heterodimer forms a histone-like octamer complex with the TAF II p105/TAF II p20 heterodimer. Several TAF II p70 isoforms exist due to alternative splicing.

## REFERENCES

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2. Buratowski, S., et al. 1989. Five intermediate complexes in transcription initiation by RNA polymerase II. *Cell* 56: 549-561.
3. Takada, R., et al. 1990. Identification of human TFIID components and direct interaction between a 250 kDa polypeptide and the TATA box-binding protein (TFIIDt). *Proc. Natl. Acad. Sci. USA* 89: 11809-11813.
4. Wang, S., et al. 1997. Genes induced in programmed cell death of neuronal PC12 cells and developing sympathetic neurons *in vivo*. *Dev. Biol.* 188: 322-336.
5. Muscat, G.E., et al. 1998. The corepressor N-CoR and its variants RIP13a and RIP13Δ1 directly interact with the basal transcription factors TFIIB, TAFII32 and TAFII70. *Nucleic Acids Res.* 26: 2899-2907.
6. Giani, L., et al. 2000. Expression of TAF II 70 RNA and protein during oogenesis and development of the amphibian *Pleurodeles waltl*. *Mech. Dev.* 99: 191-194.
7. Bucci, S., et al. 2001. TAFII70 protein in Cajal bodies of the amphibian germinal vesicle. *Genome* 44: 1100-1103.

## CHROMOSOMAL LOCATION

Genetic locus: TAF6 (human) mapping to 7q22.1.

## PRODUCT

TAF II p70 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 TAF II p70 shRNA Plasmid (h): sc-89790-SH and TAF II p70 shRNA (h) Lentiviral Particles: sc-89790-V as alternate gene silencing products.

For independent verification of TAF II p70 (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-89790A, sc-89790B and sc-89790C.

## 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

TAF II p70 siRNA (h) is recommended for the inhibition of TAF II p70 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.

## GENE EXPRESSION MONITORING

TAF II p70 (D-10): sc-393842 is recommended as a control antibody for monitoring of TAF II p70 gene expression knockdown by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) or immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

## RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor TAF II p70 gene expression knockdown using RT-PCR Primer: TAF II p70 (h)-PR: sc-89790-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.

## PROTOCOLS

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