SANTA CRUZ BIOTECHNOLOGY, INC.

# TAF II p140 siRNA (h): sc-90793

## BACKGROUND

TFIID is a general transcription factor that initiates preinitiation complex assembly through direct interaction with the TATA promoter element. Functioning as a multisubunit complex consisting of a small TATA-binding polypeptide and other TBP-associated factors (TAFs), TFIID mediates promoter responses to various transcriptional activators and repressors. TAF II p140, also known as TAF3 or TAF140, is a 929 amino acid subunit of the TFIID complex that contains one PHD-type zinc finger. Localized to the nucleus, TAF II p140 is required for myoblast differentiation and, like other components of TFIID, it functions to regulate transcriptional initiation and activation by RNA polymerase (POLR). Human and mouse TAF II p140 are highly homologous, suggesting a conserved function between species.

## REFERENCES


1. Gangloff, Y.G., Pointud, J.C., Thuault, S., Carré, L., Romier, C., Muratoglu, S., Brand, M., Tora, L., Couderc, J.L. and Davidson, I. 2001. The TFIID components human TAF(II)140 and *Drosophila* BIP2 (TAF(II)155) are novel metazoan homologues of yeast TAF(II)47 containing a histone fold and a PHD finger. Mol. Cell. Biol. 21: 5109-5121.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 606576. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Pointud, J.C., Mengus, G., Brancorsini, S., Monaco, L., Parvinen, M., Sassone-Corsi, P. and Davidson, I. 2003. The intracellular localisation of TAF7L, a paralogue of transcription factor TFIID subunit TAF7, is developmentally regulated during male germ-cell differentiation. J. Cell Sci. 116: 1847-1858.
4. Soutoglou, E., Demény, M.A., Scheer, E., Fienga, G., Sassone-Corsi, P. and Tora, L. 2005. The nuclear import of TAF10 is regulated by one of its three histone fold domain-containing interaction partners. Mol. Cell. Biol. 25: 4092-4104.
5. Vermeulen, M., Mulder, K.W., Denissov, S., Pijnappel, W.W., van Schaik, F.M., Varier, R.A., Baltissen, M.P., Stunnenberg, H.G., Mann, M. and Timmers, H.T. 2007. Selective anchoring of TFIID to nucleosomes by trimethylation of Histone H3 Lysine 4. Cell 131: 58-69.


## CHROMOSOMAL LOCATION

Genetic locus: TAF3 (human) mapping to 10p14.

## PRODUCT

TAF II p140 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TAF II p140 shRNA Plasmid (h): sc-90793-SH and TAF II p140 shRNA (h) Lentiviral Particles: sc-90793-V as alternate gene silencing products.

For independent verification of TAF II p140 (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-90793A, sc-90793B and sc-90793C.

## 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 µl of the RNAse-free water provided. Resuspension of the siRNA duplex in 330 µl of RNAse-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

## APPLICATIONS

TAF II p140 siRNA (h) is recommended for the inhibition of TAF II p140 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 µM in 66 µl. 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 TAF II p140 gene expression knockdown using RT-PCR Primer: TAF II p140 (h)-PR: sc-90793-PR (20 µl, 452 bp). 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 for detailed protocols and support products.