



TAF II p150 siRNA (m): sc-154048

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 (TBP) and other TBP-associated factors (TAFs), and is essential for mediating promoter responses to multiple repressors and activators. TAF II p150 [TAF2 RNA polymerase II, TATA box binding protein (TBP)-associated factor], also known as RNA polymerase II TBP-associated factor subunit B, transcription initiation factor TFIID subunit 2, TAF2B, CTF150, TAFII150 or TAF2, is a 1,199 amino acid protein which is widely expressed and localizes to the nucleus. TAF II p150 is a member of the TAF2 family, and is a component of both TFIID and the TFIIC-HAT complex. TAF II p150 is known to stabilize TFIID binding to a core promoter and interacts with TAF II p135. The gene encoding TAF II p150 maps to human chromosome 8q24.12.

REFERENCES

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2. Kaufmann, J., Ahrens, K., Koop, R., Smale, S.T. and Müller, R. 1998. CTF150, a human cofactor for transcription factor IID-dependent initiator function. *Mol. Cell. Biol.* 18: 233-239.
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4. Chalkley, G.E. and Verrijzer, C.P. 1999. DNA binding site selection by RNA polymerase II TAFs: a TAF(II)250-TAF(II)150 complex recognizes the initiator. *EMBO J.* 18: 4835-4845.
5. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 604912. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Cavusoglu, N., Brand, M., Tora, L. and Van Dorsselaer, A. 2003. Novel subunits of the TATA binding protein free TAFII-containing transcription complex identified by matrix-assisted laser desorption/ionization-time of flight mass spectrometry following one-dimensional gel electrophoresis. *Proteomics* 3: 217-223.

CHROMOSOMAL LOCATION

Genetic locus: Tcf2 (mouse) mapping to 15 D1.

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.

PRODUCT

TAF II p150 siRNA (m) 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TAF II p150 shRNA Plasmid (m): sc-154048-SH and TAF II p150 shRNA (m) Lentiviral Particles: sc-154048-V as alternate gene silencing products.

For independent verification of TAF II p150 (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-154048A, sc-154048B and sc-154048C.

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

APPLICATIONS

TAF II p150 siRNA (m) is recommended for the inhibition of TAF II p150 expression in mouse 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 μ M in 66 μ 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 TAF II p150 gene expression knockdown using RT-PCR Primer: TAF II p150 (m)-PR: sc-154048-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.