

TAF II p32 siRNA (h): sc-38496

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, p28, p32, p100, p130, p170 and p250, which is the largest subunit of TFIID. TAF II p32 is the human homologue of the *Drosophila* TAFII40 and is upregulated during apoptosis. TAF II p32 interacts with the activation domain of the viral protein 16, TFIIB and the class II transactivator (CIITA) to modulate transcription. The human and murine TAF II p32 proteins are distinct isoforms, designated TAF II p32 α and β , respectively, and are thought to have individual roles in regulation. TAF II p28 and TAF II p18 interact with one another *in vitro* and intracellularly, and both interact with TBP through distinct domains. TAF II p28 potentiates transactivation of the estrogen and vitamin D₃ receptors (ER and VDR) and is the limiting factor in the RXR α activation pathway.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: TAF9 (human) mapping to 5q13.2.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

PRODUCT

TAF II p32 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 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see TAF II p32 shRNA Plasmid (h): sc-38496-SH and TAF II p32 shRNA (h) Lentiviral Particles: sc-38496-V as alternate gene silencing products.

For independent verification of TAF II p32 (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-38496A, sc-38496B and sc-38496C.

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 p32 siRNA (h) is recommended for the inhibition of TAF II p32 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 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 p32 gene expression knockdown using RT-PCR Primer: TAF II p32 (h)-PR: sc-38496-PR (20 μ l, 469 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.