

TAF II p68 (TAF15B11A6): sc-81121

BACKGROUND

TFIID is a general transcription factor which initiates preinitiation complex assembly through direct interaction with the TATA promoter element. It is a multisubunit complex consisting of a small TATA-binding polypeptide and other TBP-associated factors (TAFs). TAF II p68, also known as TAF15, RBP56 or TAF2N, is a member of the RNA polymerase II multiprotein complex and is present in certain TFIID subcomplexes. Expressed throughout the body, TAF II p68 is a single-stranded RNA binding protein that shares homology with TLS (translocated in liposarcoma) and EWS (Ewing's sarcoma), both of which are proto-oncogenes. Fusion of TAF II p68 with certain transcription factors transforms it into an oncoprotein with oncogenic potential at the N-terminus. When, for example, TAF II p68 is fused with TEC (translocated in extraskeletal chondrosarcoma), the fusion pair acts as an oncoprotein in which TAF II p68 is the transactivation domain. Defects in the gene encoding TAF II p68 are associated with extraskeletal myxoid chondrosarcoma, a malignant soft tumor.

REFERENCES

1. Bertolotti, A., et al. 1996. hTAF II 68, a novel RNA/ssDNA-binding protein with homology to the pro-oncoproteins TLS/FUS and EWS is associated with both TFIID and RNA polymerase II. *EMBO J.* 15: 5022-5031.
2. Morohoshi, F., et al. 1998. Genomic structure of the human RBP56/hTAF II 68 and FUS/TLS genes. *Gene* 221: 191-198.
3. Panagopoulos, I., et al. 2000. Fusion of the RBP56 and CHN genes in extraskeletal myxoid chondrosarcomas with translocation t(9;17)(q22;q11). *Oncogene* 18: 7594-7598.
4. Bertolotti, A., et al. 2000. The N-terminal domain of human TAF II 68 displays transactivation and oncogenic properties. *Oncogene* 18: 8000-8010.
5. Martini, A., et al. 2002. Recurrent rearrangement of the Ewing's sarcoma gene, EWSR1, or its homologue, TAF15, with the transcription factor CIZ/NMP4 in acute leukemia. *Cancer Res.* 62: 5408-5412.
6. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 601574. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
7. Lee, H.J., et al. 2004. Stimulation of hTAF II 68 (NTD)-mediated transactivation by v-Src. *FEBS Lett.* 564: 188-198.
8. Law, W.J., et al. 2006. TLS, EWS and TAF15: a model for transcriptional integration of gene expression. *Brief. Funct. Genomic Proteomic* 5: 8-14.

CHROMOSOMAL LOCATION

Genetic locus: TAF15 (human) mapping to 17q12.

SOURCE

TAF II p68 (TAF15B11A6) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the N-terminus of TAF II p68 of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

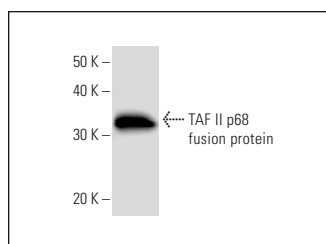
APPLICATIONS

TAF II p68 (TAF15B11A6) is recommended for detection of TAF II p68 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for TAF II p68 siRNA (h): sc-94009, TAF II p68 shRNA Plasmid (h): sc-94009-SH and TAF II p68 shRNA (h) Lentiviral Particles: sc-94009-V.

Molecular Weight of TAF II p68: 68 kDa.

DATA



TAF II p68 (TAF15B11A6): sc-81121. Western Blot analysis of human recombinant TAF II p68 fusion protein.

SELECT PRODUCT CITATIONS

1. Wang, X., et al. 2008. Induced ncRNAs allosterically modify RNA-binding proteins in *cis* to inhibit transcription. *Nature* 454: 126-130.
2. Lee, Y.B., et al. 2013. Hexanucleotide repeats in ALS/FTD form length-dependent RNA foci, sequester RNA binding proteins, and are neurotoxic. *Cell Rep* 5: 1178-1186.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

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.