

TAF II p68 (G-14): sc-109061

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

- 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.
- Morohoshi, F., et al. 1998. Genomic structure of the human RBP56/hTAFII68 and FUS/TLS genes. *Gene* 221: 191-198.
- 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.
- Bertolotti, A., et al. 2000. The N-terminal domain of human TAFII68 displays transactivation and oncogenic properties. *Oncogene* 18: 8000-8010.
- 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.
- 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/>
- Lee, H.J., et al. 2004. Stimulation of hTAFII68 (NTD)-mediated transactivation by v-Src. *FEBS Lett.* 564: 188-198.
- 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.
- Kim, S., et al. 2007. Regulation of oncogenic transcription factor hTAF(II)68-TEC activity by human glyceraldehyde-3-phosphate dehydrogenase (GAPDH). *Biochem. J.* 404: 197-206.

CHROMOSOMAL LOCATION

Genetic locus: TAF15 (human) mapping to 17q12; Taf15 (mouse) mapping to 11 C.

SOURCE

TAF II p68 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TAF II p68 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-109061 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-109061 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

TAF II p68 (G-14) is recommended for detection of TAF II p68 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

TAF II p68 (G-14) is also recommended for detection of TAF II p68 in additional species, including equine, canine and porcine.

Suitable for use as control antibody for TAF II p68 siRNA (h): sc-94009, TAF II p68 siRNA (m): sc-154052, TAF II p68 shRNA Plasmid (h): sc-94009-SH, TAF II p68 shRNA Plasmid (m): sc-154052-SH, TAF II p68 shRNA (h) Lentiviral Particles: sc-94009-V and TAF II p68 shRNA (m) Lentiviral Particles: sc-154052-V.

TAF II p68 (G-14) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of TAF II p68: 68 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.



Try **TAF II p68 (TAF15B11A6): sc-81121**, our highly recommended monoclonal alternative to TAF II p68 (G-14).