SANTA CRUZ BIOTECHNOLOGY, INC.

TAF II p20 (G-16): sc-103891

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 p20, also known as TAF12, TAF15, TAF2J or TAFII20, is a 161 amino acid subunit of TFIID that localizes to the nucleus and contains one histone-fold domain. Expressed ubiquitously, TAF II p20 interacts with other members of the TFIID complex and, via this interaction, plays a role in mediating transcriptional activation and repression. Two isoforms of TAF II p20 exist due to alternative splicing events.

REFERENCES

1. Holstege, F.C., et al. 1997. Three transitions in the RNA polymerase II transcription complex during initiation. EMBO J. 16: 7468-7480.
2. Ogryzko, V.V., et al. 1998. Histone-like TAFs within the PCAF histone acetylase complex. Cell 94: 35-44.
3. Gangloff, Y.G., et al. 2000. The human TFIID components TAF(II)135 and TAF(II)20 and the yeast SAGA components ADA1 and TAF(II)68 heterodimerize to form histone-like pairs. Mol. Cell. Biol. 20: 340-351.
4. Werten, S., et al. 2002. Crystal structure of a subcomplex of human transcription factor TFIID formed by TATA binding protein-associated factors hTAF4 (hTAF(II)135) and hTAF12 (hTAF(II)20). J. Biol. Chem. 277: 45502-45509.
5. Guermah, M., et al. 2003. The TBN protein, which is essential for early embryonic mouse development, is an inducible TAFII implicated in adipogenesis. Mol. Cell 12: 991-1001.
6. Cavusoglu, N., et al. 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: TAF12 (human) mapping to 1p35.3; Taf12 (mouse) mapping to 4 D2.3.

SOURCE

TAF II p20 (G-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of TAF II p20 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.

Blocking peptide available for competition studies, sc-103891 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

TAF II p20 (G-16) is recommended for detection of TAF II p20 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], 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); non cross-reactive with other TAF II p family members.

Suitable for use as control antibody for TAF II p20 siRNA (h): sc-88359, TAF II p20 siRNA (m): sc-106595, TAF II p20 shRNA Plasmid (h): sc-88359-SH, TAF II p20 shRNA Plasmid (m): sc-106595-SH, TAF II p20 shRNA (h) Lentiviral Particles: sc-88359-V and TAF II p20 shRNA (m) Lentiviral Particles: sc-106595-V.

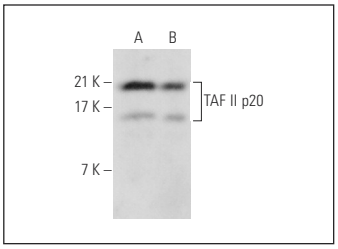
Molecular Weight of TAF II p20: 21 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132 or HeLa nuclear extract: sc-2120.

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



TAF II p20 (G-16): sc-103891. Western blot analysis of TAF II p20 expression in Jurkat (**A**) and HeLa (**B**) nuclear extracts.

STORAGE

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