SANTA CRUZ BIOTECHNOLOGY, INC.

TAF9A/B (H-95): sc-98825

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

In eukaryotic systems, the process of initiating transcription from protein-coding genes requires the presence of RNA polymerase II and a broad family of auxiliary transcription factors. Such factors can be divided into two major functional classes: the basal factors that mediate the transcription of all Pol II genes, including TFIIA, TFIIB, TFIID, TFIIE, TFIIF and TFIIH, and sequence-specific factors that regulate gene expression. TFIID, one of the basal transcription factors, facilitates the preinitiation complex assembly through direct interactions with the TATA promoter element. TAF9B (transcription initiation factor TFIID subunit 9B), also known as TAF9L, is similar to TAF9 and is a component of the TFIID complex. Essential for cell viability, TAF9B is involved in transcriptional activation through its N-terminal association with TP53/p53, a protein essential for transcription. TAF9B is ubiquitously expressed and is localized to the nucleus. TAF9 (transcription initiation factor TFIID subunit 9), also known as TAF9A or TAF II p32, is a 264 amino acid nuclear protein that, like TAF9B, is a component of the TFIID complex and is required for cell viability.

REFERENCES

1. Matsui, T., et al. 1980. Multiple factors required for accurate initiation of transcription by purified RNA polymerase II. J. Biol. Chem. 255: 11992-11996.
2. Buratowski, S., et al. 1989. Five intermediate complexes in transcription initiation by RNA polymerase II. Cell 56: 549-561.
3. Dynlacht, B.D., et al. 1991. Isolation of coactivators associated with the TATA-binding protein that mediate transcriptional activation. Cell 66: 563-576.
4. Takada, R., et al. 1992. Identification of human TFIID components and direct interaction between a 250 kDa polypeptide and the TATA box-binding protein (TFIID). Proc. Natl. Acad. Sci. USA 89: 11809-11813.
5. Klemm, R.D., et al. 1995. Molecular cloning and expression of the 32 kDa subunit of human TFIID reveals interactions with VP16 and TFIIB that mediate transcriptional activation. Proc. Natl. Acad. Sci. USA 92: 5788-5792.
6. Mengus, G., et al. 1995. Cloning and characterization of hTAFII18, hTAFII20 and hTAFII28: three subunits of the human transcription factor TFIID. EMBO J. 14: 1520-1531.

CHROMOSOMAL LOCATION

Genetic locus: TAF9 (human) mapping to 5q13.2, TAF9B (human) mapping to Xq21.1; Taf9 (mouse) mapping to 13 D1, Taf9b (mouse) mapping to X D.

SOURCE

TAF9A/B (H-95) is a rabbit polyclonal antibody raised against amino acids 37-131 mapping near the N-terminus of TAF9B 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.

APPLICATIONS

TAF9A/B (H-95) is recommended for detection of TAF9A and TAF9B 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).

TAF9A/B (H-95) is also recommended for detection of TAF9A and TAF9B in additional species, including equine, canine, bovine and porcine.

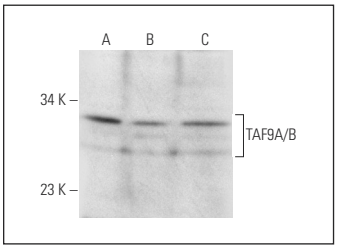
Molecular Weight of TAF9A/TAF9B: 32 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, HeLa nuclear extract: sc-2120 or MCF7 nuclear extract: sc-2149.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



TAF9A/B (H-95): sc-98825. Western blot analysis of TAF9A/B expression in HeLa (**A**) and MCF7 (**B**) nuclear extracts and HeLa whole cell lysate (**C**).

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.