# TAF9B (N-12): sc-131795



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.

## **REFERENCES**

- Matsui, T., et al. 1980. Multiple factors required for accurate initiation of transcription by purified RNA polymerase II. J. Biol. Chem. 255: 11992-11996.
- Buratowski, S., et al. 1989. Five intermediate complexes in transcription initiation by RNA polymerase II. Cell 56: 549-561.
- Takada, R., et al. 1990. Identification of human TFIID components and direct interaction between a 250 kDa polypeptide and the TATA box-binding protein (TFIIDt). Proc. Natl. Acad. Sci. USA 89: 11809-11813.
- Chen, Z. and Manley, J.L. 2003. *In vivo* functional analysis of the histone 3-like TAF9 and a TAF9-related factor, TAF9L. J. Biol. Chem. 278: 35172-35183.
- 5. Frontini, M., et al. 2005. TAF9B (formerly TAF9L) is a bona fide TAF that has unique and overlapping roles with TAF9. Mol. Cell. Biol. 25: 4638-4649.

## CHROMOSOMAL LOCATION

Genetic locus: TAF9B (human) mapping to Xq21.1; Taf9b (mouse) mapping to X D.

# **SOURCE**

TAF9B (N-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of TAF9B of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-131795 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

#### **STORAGE**

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

#### **APPLICATIONS**

TAF9B (N-12) is recommended for detection of TAF9B of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g 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 family members.

Suitable for use as control antibody for TAF9B siRNA (h): sc-91025, TAF9B siRNA (m): sc-154055, TAF9B shRNA Plasmid (h): sc-91025-SH, TAF9B shRNA Plasmid (m): sc-154055-SH, TAF9B shRNA (h) Lentiviral Particles: sc-91025-V and TAF9B shRNA (m) Lentiviral Particles: sc-154055-V.

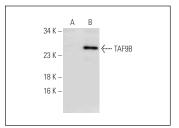
Molecular Weight of TAF9B: 32 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, TAF9B (h2): 293 Lysate: sc-174088 or HeLa whole cell lysate: sc-2200.

## **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



TAF9B (N-12): sc-131795. Western blot analysis of TAF9B expression in non-transfected: sc-110760 (A) and human TAF9B transfected: sc-174088 (B) 293 whole cell lysates.

# **RESEARCH USE**

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



Try TAF9A/B (G-1): sc-271463 or TAF9B (3365C4a): sc-81125, our highly recommended monoclonal alternatives to TAF9B (N-12).