

## TAF6L (E-21): sc-102126

### 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. TFIID is a general transcription factor that initiates preinitiation complex assembly through direct interaction with the TATA promoter element. Functioning as a multi-subunit complex consisting of a small TATA-binding polypeptide and other TBP-associated factors (TAFs), TFIID mediates promoter responses to various transcriptional activators and repressors. TAF6L, also known as PAF65A, is a 622 amino acid nuclear protein that functions as part of the PCAF (p300/CBP-associated factor) histone acetylase complex. Working in conjunction with several other TAF proteins, TAF6L acetylates nucleosomal histones, a process that is required for proper transcription and differentiation. Upon DNA damage, TAF6L may be phosphorylated by ATR or ATM.

### REFERENCES

1. Struhl, K. and Moqtaderi, Z. 1998. The TAFs in the HAT. *Cell* 94: 1-4.
2. Ogrzyzko, V.V., et al. 1998. Histone-like TAFs within the PCAF histone acetylase complex. *Cell* 94: 35-44.
3. Brand, M., et al. 2001. UV-damaged DNA-binding protein in the TFIIIC complex links DNA damage recognition to nucleosome acetylation. *EMBO J.* 20: 3187-3196.
4. Martinez, E., et al. 2001. Human STAGA complex is a chromatin-acetylating transcription coactivator that interacts with pre-mRNA splicing and DNA damage-binding factors *in vivo*. *Mol. Cell. Biol.* 21: 6782-6795.
5. Online Mendelian Inheritance in Man, OMIM™. 2001. Johns Hopkins University, Baltimore, MD. MIM Number: 602946. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
6. Liu, X., et al. 2003. c-Myc transformation domain recruits the human STAGA complex and requires TRRAP and GCN5 acetylase activity for transcription activation. *J. Biol. Chem.* 278: 20405-20412.
7. 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.
8. Wyrwicz, L.S., et al. 2007. A common *cis*-element in promoters of protein synthesis and cell cycle genes. *Acta Biochim. Pol.* 54: 89-98.

### CHROMOSOMAL LOCATION

Genetic locus: TAF6L (human) mapping to 11q12.3; Taf6l (mouse) mapping to 19 A.

### SOURCE

TAF6L (E-21) is a purified rabbit polyclonal antibody raised against TAF6L of human origin.

### PRODUCT

Each vial contains 100 µg IgG in 1.0 ml PBS with < 0.1% sodium azide, 0.1% gelatin and <0.02% sucrose.

### APPLICATIONS

TAF6L (E-21) is recommended for detection of TAF6L of mouse, rat, human and dog 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TAF6L siRNA (h): sc-96582, TAF6L siRNA (m): sc-154053, TAF6L shRNA Plasmid (h): sc-96582-SH, TAF6L shRNA Plasmid (m): sc-154053-SH, TAF6L shRNA (h) Lentiviral Particles: sc-96582-V and TAF6L shRNA (m) Lentiviral Particles: sc-154053-V.

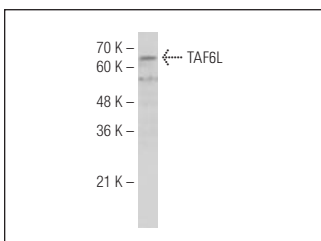
Molecular Weight of TAF6L: 69 kDa.

Positive Controls: Jurkat whole cell lysate: sc-2204.

### 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).

### DATA



TAF6L (E-21): sc-102126. Western blot analysis of TAF6L expression in Jurkat whole cell lysate.

### 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.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.