

TAF5L (S-23): sc-134052

BACKGROUND

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. TAF5L (TAF5-like RNA polymerase II p300/CBP-associated factor-associated factor subunit 5L), also known as PAF65B, is a 589 amino acid protein that localizes to the nucleus and contains six WD repeats. Existing as a component of the PCAF histone acetylase complex, TAF5L interacts with a number of TAFs and, via this interaction, plays a role in histone acetylation and transcription initiation. Defects in the gene encoding TAF5L, which is expressed as multiple alternatively spliced isoforms, are associated with the pathogenesis of type I diabetes.

REFERENCES

1. Struhl, K., et al. 1998. The TAFs in the HAT. *Cell* 94: 1-4.
2. Ogryzko, V.V., et al. 1998. Histone-like TAFs within the PCAF histone acetylase complex. *Cell* 94: 35-44.
3. Brand, M., et al. 1999. Identification of TATA-binding protein-free TAFII-containing complex subunits suggests a role in nucleosome acetylation and signal transduction. *J. Biol. Chem.* 274: 18285-18289.
4. Martinez, E., et al. 2001. Human STAGA complex is a chromatin-acetylation transcription co-activator that interacts with pre-mRNA splicing and DNA damage-binding factors *in vivo*. *Mol. Cell. Biol.* 21: 6782-6795.
5. 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.
6. Chistiakov, D.A., et al. 2005. The TAF5L gene on chromosome 1q42 is associated with type 1 diabetes in Russian affected patients. *Autoimmunity* 38: 283-293.
7. Kuninger, D., et al. 2006. Muscle cell survival mediated by the transcriptional co-activators p300 and PCAF displays different requirements for acetyltransferase activity. *Am. J. Physiol., Cell Physiol.* 291: C699-C709.
8. Okumura, K., et al. 2006. PCAF modulates PTEN activity. *J. Biol. Chem.* 281: 26562-26568.

CHROMOSOMAL LOCATION

Genetic locus: TAF5L (human) mapping to 1q42.13.

SOURCE

TAF5L (S-23) is a Protein A purified rabbit polyclonal antibody raised against synthetic TAF5L peptide 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

TAF5L (S-23) is recommended for detection of TAF5L of 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for TAF5L siRNA (h): sc-88360, TAF5L shRNA Plasmid (h): sc-88360-SH and TAF5L shRNA (h) Lentiviral Particles: sc-88360-V.

Molecular Weight of TAF5L isoforms: 66/37 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).

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 or our catalog for detailed protocols and support products.