



## BTF3L2 (A-11): sc-86310

### BACKGROUND

The initiation of gene transcription involves the ordered assembly of a multi-protein complex on proximal promoter elements such as the TATA box. In addition to RNA polymerase II (Pol II), the transcription factor class II (TFII) family of proteins are required for initiation of transcription, as the first step in the formation of this initiation complex is the stable binding of TFIID to the TATA box. An additional TFII-related protein, BTF3, does not directly associate with the proximal promoter, but rather forms a stable complex with Pol II and facilitates Pol II assembly into the complex. The BTF3 gene is ubiquitously expressed and encodes two protein isoforms, BTF3a and BTF3b, which are produced from alternative splicing. The BTF3 proteins are identical, except that BTF3b lacks the first 44 amino acids at the N-terminal of BTF3a. As a consequence of this deletion, BTF3b is unable to induce transcription, despite being able to bind Pol II. Additionally, BTF3a and BTF3b associate with the widely expressed protein kinase casein kinase II. Casein kinase II phosphorylates BTF3a, as well as TFIIB, and is required for the efficient transcription of the tRNA and 5S rRNA genes by Pol III. BTF3 belongs to the NAC- $\beta$  family, which includes several related proteins, such as BTF3L1, BTF3L2, BTF3L3 and BTF3L4.

### REFERENCES

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### STORAGE

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

### CHROMOSOMAL LOCATION

Genetic locus: BTF3L2 (human) mapping to 8q13.3.

### SOURCE

BTF3L2 (A-11) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of BTF3L2 of human origin.

### PRODUCT

Each vial contains 100  $\mu$ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-86310 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

BTF3L2 (A-11) is recommended for detection of BTF3L2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Molecular Weight of BTF3L2: 8 kDa.

### 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) 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.

### 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.