



BTF3L4 (m): 293T Lysate: sc-125065

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, the transcription factors 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 RNA pol II and facilitates RNA pol II assembling into the complex. The BTF3 gene is ubiquitously expressed and encodes for 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 RNA pol II. Additionally, BTF3a and BTF3b associate with the widely expressed protein kinase CK2. CK2 phosphorylates BTF3a, as well as TFIIB, and is required for the efficient transcription of the tRNA and 5S rRNA genes by RNA pol III.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: Btf3l4 (mouse) mapping to 4 C7.

RESEARCH USE

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

PRODUCT

BTF3L4 (m): 293T Lysate represents a lysate of mouse BTF3L4 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

BTF3L4 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive BTF3L4 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.