SANTA CRUZ BIOTECHNOLOGY, INC.

TFIIB: sc-4001



BACKGROUND

In eukaryotic systems, initiation of transcription from protein-coding genes is a complex process requiring RNA polymerase II and broad families of auxiliary transcription factors. Such factors can be divided into two major functional classes: the basal factors that are required for transcription of all Pol II genes, including TFIIA, TFIIB, TFIID, TFIIE, TFIIF and TFIIH; and sequence-specific factors that regulate gene expression. The basal transcription factors and Pol II form a specific multiprotein complex near the transcription start site by interacting with core promotor elements such as the TATA box generally located 25-30 base pairs upstream of the transcription start site. Template commitment is established by the initial binding of TFIID to the "TATA" element of the promotor, a step which may be facilitated by TFIIA. TFIIB then acts as the bridge between TFIID and RNA polymerase II.

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SOURCE

TFIIB is expressed in E. coli as a 33 kDa full length protein of human origin.

PRODUCT

TFIIB is purified from bacterial lysates (> 98%) by heparin affinity chromatography and supplied as 50 μ g purified protein in PBS containing 5 mM DTT and 50% glycerol.

STORAGE

Store at -20° C. Stable for one year from the date of shipment.

PROTOCOLS

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

APPLICATIONS

TFIIB is suitable for *in vitro* transcription studies, DNA footprinting and as a gel shift control for gel supershift antibodies. TFIIB is suitable as a Western blotting control for sc-23875, sc-56793, sc-136190, sc-271736 and sc-271784.

SELECT PRODUCT CITATIONS

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RESEARCH USE

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