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# **TFIIB Antibody**

Purified Mouse Monoclonal Antibody (Mab) Catalog # AP53273

#### **Product Information**

Application WB Primary Accession Q00403

**Reactivity** Human, Mouse

Host Mouse
Clonality Monoclonal
Isotype IgG2b
Calculated MW 34833

### **Additional Information**

**Gene ID** 2959

Other Names General transcription factor IIB;General transcription factor TFIIB;gtf2b;RNA

polymerase II transcription factor IIB;S300 II;S300-II;TF

IIB;TF2B;TF2B\_HUMAN;TFIIB;Transcription initiation factor IIB.

**Dilution** WB~~1:500

Format Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide, pH

7.3.

**Storage** Store at 4°C short term. Aliquot and store at -20°C long term. Avoid

freeze/thaw cycles.

#### **Protein Information**

Name GTF2B

Synonyms TF2B, TFIIB

**Function** General transcription factor that plays a role in transcription initiation by

RNA polymerase II (Pol II). Involved in the pre-initiation complex (PIC) formation and Pol II recruitment at promoter DNA (PubMed:12931194, PubMed:1517211, PubMed:1876184, PubMed:1946368, PubMed:27193682, PubMed:3029109, PubMed:3818643, PubMed:7601352, PubMed:8413225, PubMed:8515820, PubMed:8516311, PubMed:8516312, PubMed:9420329). Together with the TATA box-bound TBP forms the core initiation complex and

provides a bridge between TBP and the Pol II-TFIIF complex

(PubMed:<u>8413225</u>, PubMed:<u>8504927</u>, PubMed:<u>8515820</u>, PubMed:<u>8516311</u>, PubMed:<u>8516312</u>). Released from the PIC early following the onset of transcription during the initiation and elongation transition and reassociates with TBP during the next transcription cycle (PubMed:<u>7601352</u>). Associates

with chromatin to core promoter-specific regions (PubMed:12931194, PubMed:24441171). Binds to two distinct DNA core promoter consensus sequence elements in a TBP- independent manner; these IIB-recognition elements (BREs) are localized immediately upstream (BREu), 5'-[GC][GC][GA]CGCC-3', and downstream (BREd), 5'-[GA]T[TGA][TG][TG][TG]-3', of the TATA box element (PubMed:10619841, PubMed:16230532, PubMed:7675079, PubMed:9420329). Modulates transcription start site selection (PubMed:10318856). Also exhibits autoacetyltransferase activity that contributes to the activated transcription (PubMed:12931194).

**Cellular Location** 

Nucleus. Chromosome. Note=Non-acetylated form colocalizes with DNA in the G0/1, S and G2 phases of the cell cycle, but not during mitosis (PubMed:24441171). Acetylated form colocalizes at transcriptionally silent mitotic chromatids during mitosis at metaphase, anaphase, and telophase phases of the cell cycle (PubMed:24441171).

**Tissue Location** 

Expressed in the inner cell mass forming the embryoblast (PubMed:24441171). Not detected in cells from the outer thin layer trophoblast (at protein level) (PubMed:24441171)

## **Background**

General factor that plays a major role in the activation of eukaryotic genes transcribed by RNA polymerase II.

#### References

Ha I.,et al.Nature 352:689-695(1991).

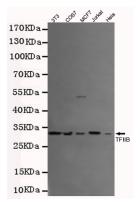
Malik S.,et al.Proc. Natl. Acad. Sci. U.S.A. 88:9553-9557(1991).

Ota T.,et al.Nat. Genet. 36:40-45(2004).

Goshima N.,et al.Nat. Methods 5:1011-1017(2008).

Gregory S.G.,et al.Nature 441:315-321(2006).

## **Images**



Western blot detection of TFIIB in Jurkat,MCF7,COS7,3T3 and Hela cell lysates using TFIIB mouse mAb (1:500 diluted).Observed band size: 34KDa

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