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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 ascites

Storage Store at -20 °C.Stable for 12 months from date of receipt

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:8413225, PubMed:8504927, PubMed:8515820, PubMed:8516311, PubMed:8516312). 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:7601352). 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][GT][TG]-3', of the TATA box element (PubMed:10619841,

PubMed:<u>16230532</u>, PubMed:<u>7675079</u>, PubMed:<u>9420329</u>). Modulates transcription start site selection (PubMed:<u>10318856</u>). Also exhibits

autoacetyltransferase activity that contributes to the activated transcription

(PubMed:<u>12931194</u>).

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)

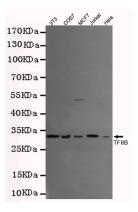
Background

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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