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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: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][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)

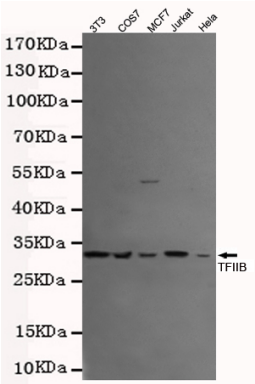
Background

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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