

GTF2B antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI16268

Product Information

Application	WB
Primary Accession	<u>Q00403</u>
Other Accession	<u>NM_001514</u> , <u>NP_001505</u>
Reactivity	Human, Mouse, Rabbit, Pig, Dog, Guinea Pig, Horse
Predicted	Human, Mouse, Rabbit, Pig, Chicken, Dog, Guinea Pig, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34833

Additional Information

Gene ID	2959
Alias Symbol Other Names	TF2B, TFIIB Transcription initiation factor IIB, General transcription factor TFIIB, S300-II, GTF2B, TF2B, TFIIB
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-GTF2B antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	GTF2B antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

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: <u>12931194</u> , PubMed: <u>1517211</u> , PubMed: <u>1876184</u> , PubMed: <u>1946368</u> , PubMed: <u>27193682</u> , PubMed: <u>3029109</u> , PubMed: <u>3818643</u> , PubMed: <u>7601352</u> , PubMed: <u>8413225</u> , PubMed: <u>8515820</u> , PubMed: <u>8516311</u> , PubMed: <u>8516312</u> , PubMed: <u>9420329</u>). 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: <u>12931194</u> , PubMed: <u>24441171</u>). 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: <u>10619841</u> , 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)

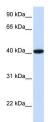
Background

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



WB Suggested Anti-GTF2B Antibody Titration: 0.2-1 $\mu g/ml$ ELISA Titer: 1:312500 Positive Control: Human brain

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.