

# 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)

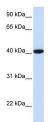
#### Background

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'.