

GTF2B Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP14354a

Specification

GTF2B Antibody (N-term) - Product Information

Application WB,E
Primary Accession Q00403

Other Accession P62916, P62915, Q4R3I5, Q2KIN8, NP 001505.1

Reactivity Human, Mouse Predicted Bovine, Monkey, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 34833
Antigen Region 42-71

GTF2B Antibody (N-term) - Additional Information

Gene ID 2959

Other Names

Transcription initiation factor IIB, General transcription factor TFIIB, S300-II, GTF2B, TF2B, TFIIB

Target/Specificity

This GTF2B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 42-71 amino acids from the N-terminal region of human GTF2B.

Dilution

WB~~1:1000

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

GTF2B Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

GTF2B Antibody (N-term) - 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:1876184, PubMed:1946368, PubMed:1517211, PubMed:3818643, PubMed:3029109, PubMed:8413225, PubMed:8515820, PubMed:8516311, PubMed:8516312, PubMed: <u>7601352</u>, PubMed: <u>9420329</u>, PubMed: <u>12931194</u>, PubMed: <u>27193682</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:8504927, PubMed:8413225, 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: 9420329, PubMed: 16230532, PubMed: 7675079, PubMed: 10619841). Modulates transcription start site selection (PubMed: 10318856). Exhibits also 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)

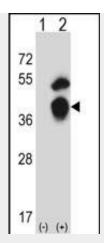
GTF2B Antibody (N-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

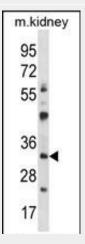
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GTF2B Antibody (N-term) - Images





Western blot analysis of GTF2B (arrow) using rabbit polyclonal GTF2B Antibody (N-term) (Cat. #AP14354a). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the GTF2B gene.



GTF2B Antibody (N-term) (Cat. #AP14354a) western blot analysis in mouse kidney tissue lysates (35ug/lane). This demonstrates the GTF2B antibody detected the GTF2B protein (arrow).

GTF2B Antibody (N-term) - Background

This gene encodes the general transcription factor IIB, one of the ubiquitous factors required for transcription initiation by RNA polymerase II. The protein localizes to the nucleus where it forms a complex (the DAB complex) with transcription factors IID and IIA. Transcription factor IIB serves as a bridge between IID, the factor which initially recognizes the promoter sequence, and RNA polymerase II.

GTF2B Antibody (N-term) - References

Wang, Y., et al. Curr. Biol. 20(6):548-553(2010) Thompson, N.E., et al. J. Biol. Chem. 284(37):24754-24766(2009) Gilman, B., et al. J. Biol. Chem. 284(14):9093-9098(2009) Vogt, C., et al. J. Virol. 82(22):11446-11453(2008) Elsby, L.M., et al. EMBO Rep. 7(9):898-903(2006)