

TBP Antibody
Mouse Monoclonal Antibody (Mab)
Catalog # AM2196b

Specification

TBP Antibody - Product Information

Application	WB, IHC-P,E
Primary Accession	P20226
Reactivity	Human, Mouse, Rat, Cynomolgus
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	37698

TBP Antibody - Additional Information

Gene ID 6908

Other Names

TATA-box-binding protein, TATA sequence-binding protein, TATA-binding factor, TATA-box factor, Transcription initiation factor TFIID TBP subunit, TBP, GTF2D1, TF2D, TFIID

Target/Specificity

Purified His-tagged TBP protein was used to produced this monoclonal antibody.

Dilution

WB~~1:1000

IHC-P~~1:25

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.

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

TBP Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

TBP Antibody - Protein Information

Name TBP

Synonyms GTF2D1, TF2D, TFIID {ECO:0000303|PubMed:

Function The TFIID basal transcription factor complex plays a major role in the initiation of RNA

polymerase II (Pol II)-dependent transcription (PubMed:[33795473](#)). TFIID recognizes and binds promoters with or without a TATA box via its subunit TBP, a TATA-box-binding protein, and promotes assembly of the pre-initiation complex (PIC) (PubMed:[2194289](#), PubMed:[2363050](#), PubMed:[2374612](#), PubMed:[27193682](#), PubMed:[33795473](#)). The TFIID complex consists of TBP and TBP-associated factors (TAFs), including TAF1, TAF2, TAF3, TAF4, TAF5, TAF6, TAF7, TAF8, TAF9, TAF10, TAF11, TAF12 and TAF13 (PubMed:[27007846](#), PubMed:[33795473](#)). The TFIID complex structure can be divided into 3 modules TFIID-A, TFIID-B, and TFIID-C (PubMed:[33795473](#)). TBP forms the TFIID-A module together with TAF3 and TAF5 (PubMed:[33795473](#)). TBP is a general transcription factor that functions at the core of the TFIID complex (PubMed:[2194289](#), PubMed:[2363050](#), PubMed:[2374612](#), PubMed:[27193682](#), PubMed:[33795473](#), PubMed:[9836642](#)). During assembly of the core PIC on the promoter, as part of TFIID, TBP binds to and also bends promoter DNA, irrespective of whether the promoter contains a TATA box (PubMed:[33795473](#)). Component of a BRF2-containing transcription factor complex that regulates transcription mediated by RNA polymerase III (PubMed:[26638071](#)). Component of the transcription factor SL1/TIF-IB complex, which is involved in the assembly of the PIC during RNA polymerase I-dependent transcription (PubMed:[15970593](#)). The rate of PIC formation probably is primarily dependent on the rate of association of SL1 with the rDNA promoter (PubMed:[15970593](#)). SL1 is involved in stabilization of nucleolar transcription factor 1/UBTF on rDNA (PubMed:[15970593](#)).

Cellular Location

Nucleus.

Tissue Location

Widely expressed, with levels highest in the testis and ovary.

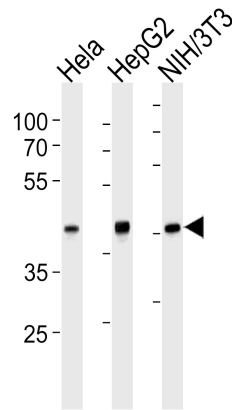
TBP Antibody - Protocols

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

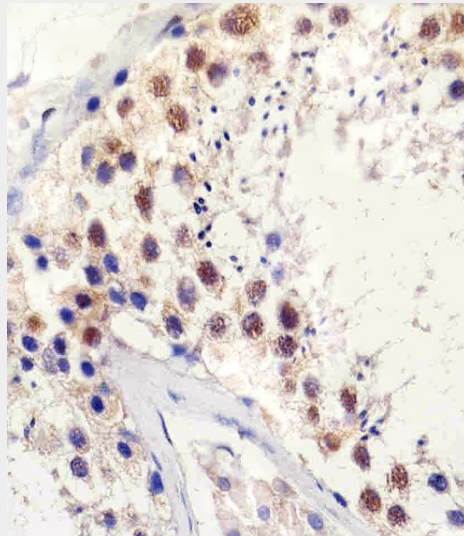
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

TBP Antibody - Images





TBP Antibody (Cat. #AM2196b) western blot analysis in HeLa, HepG2, mouse NIH/3T3 cell line lysates (35µg/lane). This demonstrates the TBP antibody detected the TBP protein (arrow).



Immunohistochemical analysis of paraffin-embedded H. testis section using TBP Antibody (Cat#AM2196b). AM2196b was diluted at 1:25 dilution. A undiluted biotinylated goat polyvalent antibody was used as the secondary, followed by DAB staining.

TBP Antibody - Background

General transcription factor that functions at the core of the DNA-binding multiprotein factor TFIID. Binding of TFIID to the TATA box is the initial transcriptional step of the pre-initiation complex (PIC), playing a role in the activation of eukaryotic genes transcribed by RNA polymerase II. Component of the transcription factor SL1/TIF-IB complex, which is involved in the assembly of the PIC (preinitiation complex) during RNA polymerase I-dependent transcription. The rate of PIC formation probably is primarily dependent on the rate of association of SL1 with the rDNA promoter. SL1 is involved in stabilization of nucleolar transcription factor 1/UBTF on rDNA.

TBP Antibody - References

- Hoffmann A., et al. Nature 346:387-390(1990).
- Peterson M.G., et al. Science 248:1625-1630(1990).
- Kao C.C., et al. Science 248:1646-1650(1990).

Ebert L., et al. Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Mungall A.J., et al. Nature 425:805-811(2003).