

#### TBP Antibody

Mouse Monoclonal Antibody (Mab) Catalog # AM8686b

### Specification

# **TBP Antibody - Product Information**

Primary Accession Reactivity Host Clonality Isotype Calculated MW P20226 Human, Mouse, Rat, Cynomolgus Mouse Monoclonal IgG1 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.

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:<u>33795473</u>). 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:<u>2194289</u>, PubMed:<u>2363050</u>, PubMed:<u>2374612</u>, PubMed:<u>27193682</u>, PubMed:<u>33795473</u>). 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:<u>27007846</u>, PubMed:<u>33795473</u>). The TFIID complex structure can be divided into 3 modules TFIID-A, TFIID-B, and TFIID-C (PubMed:<u>33795473</u>). TBP forms the TFIID-A module together with TAF3 and TAF5 (PubMed:<u>33795473</u>). TBP is a general transcription factor that functions at the core of the TFIID complex (PubMed:<u>2194289</u>, PubMed:<u>2363050</u>, PubMed:<u>2374612</u>, PubMed:<u>27193682</u>, PubMed:<u>33795473</u>, PubMed:<u>9836642</u>). 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:<u>33795473</u>). Component of a BRF2-containing transcription factor complex that regulates transcription factor SL1/TIF-IB complex, which is involved in the assembly of the PIC during RNA polymerase II (PubMed:<u>15970593</u>). The rate of PIC formation probably is primarily dependent on the rate of association of SL1 with the rDNA promoter (PubMed:<u>15970593</u>). SL1 is involved in stabilization of nucleolar transcription factor 1/UBTF on rDNA (PubMed:<u>15970593</u>).

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

**TBP Antibody - Images** 

# **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).