

TBP Antibody
Rabbit mAb
Catalog # AP90423

Specification

TBP Antibody - Product Information

Application	WB
Primary Accession	P20226
Reactivity	Rat
Clonality	Monoclonal

Other Names

TBP; GTF2D; GTF2D1; HDL4; SCA17; TFIID; TATA binding protein; TATA sequence-binding protein; TATA-binding factor; TATA-box factor;

Isotype	Rabbit IgG
Host	Rabbit
Calculated MW	37698 Da

TBP Antibody - Additional Information

Purification	Affinity-chromatography
Immunogen	A synthesized peptide derived from human TBP
Description	As one of the few proteins in the preinitiation complex that binds DNA in a sequence-specific manner, it helps position RNA polymerase II over the transcription start site of the gene. However, it is estimated that only 10-20% of human promoters have TATA boxes. Therefore, TBP is probably not the only protein involved in positioning RNA polymerase II. This protein is not suitable for samples where the nuclear envelope has been removed.
Storage Condition and Buffer	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

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.

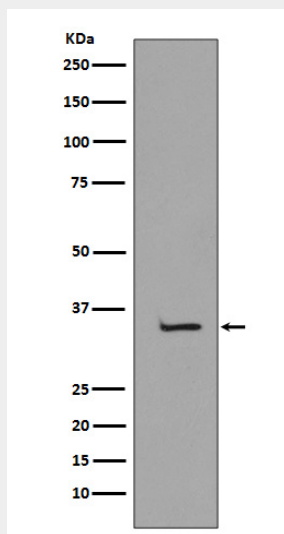
Tissue Location

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

Western blot analysis of TBP expression in K562 cell lysate.