

Anti-TBP Antibody
Catalog # ABO10851**Specification**

Anti-TBP Antibody - Product Information

Application	WB
Primary Accession	P20226
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for TATA-box-binding protein(TBP) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-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
{ECO:0000303|PubMed:2374612}

Calculated MW

37698 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Nucleus.

Tissue Specificity

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

Protein Name

TATA-box-binding protein

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human TBP(227-246aa EEQSRLAARKYARVVQKLGF), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After r^oConstitution, at 4°C for one month. It^oCan also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-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.

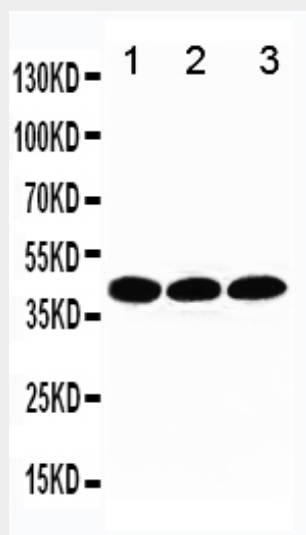
Tissue Location

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

Anti-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](#)

Anti-TBP Antibody - Images

Anti-TBP antibody, ABO10851, Western blotting
Lane 1: MCF-7 Cell Lysate
Lane 2: MM231 Cell Lysate
Lane 3: MM231 Cell Lysate

Anti-TBP Antibody - Background

TBP, TATA-binding protein, is a general transcription factor that binds specifically to a DNA sequence called the TATA box. The TBP gene is mapped to 6q27. This DNA sequence is found about 35 base pairs upstream of the transcription start site in some eukaryotic gene promoters. TBP, along with a variety of TBP-associated factors, make up the TFIID, a general transcription factor that in turn makes up part of the RNA polymerase II preinitiation complex. 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.