For Research Use Only

**TBP**

Monoclonal ANTIBODY

Catalog Number: 66166-1-Ig  6 Publications

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### Basic Information

- **Catalog Number:** 66166-1-Ig
- **Size:** 225 μg/150 μl
- **Source:** Mouse
- **Isotype:** IgG2a
- **Purification Method:** Protein A purification
- **Immunogen Catalog Number:** AG12383
- **GenBank Accession Number:** BC100341
- **GeneID (NCBI):** 6065
- **TATA box binding protein**
- **Calculated MW:** 338aa, 38 kDa
- **Observed MW:** mouse/rat 33-36 kDa and human 37-43kDa

### Applications

- **Tested Applications:** FC, IF, IHC, IP, WB, ELISA
- **Cited Applications:** WB
- **Species Specificity:** human, mouse, rat, pig
- **Cited Species:** human, rat, swine

**Note:** IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

### Positive Controls:

- **WB:** HEK-293 cells, pig liver tissue
- **IP:** HEK-293 cells
- **IHC:** human liver cancer tissue, human breast cancer tissue
- **IF:** HeLa cells

### Background Information

The TATA binding protein (TBP) is a transcription factor that binds specifically to a DNA sequence TATA box. This DNA sequence is found about 25-30 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 pre-initiation 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. This antibody detects human TBP (~40 kDa) and mouse/rat Tbp (~35 kDa).

### Notable Publications

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<tr>
<th>Author</th>
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<th>Journal</th>
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<tbody>
<tr>
<td>Yaru Sheng</td>
<td>31054192</td>
<td>Cell Profil</td>
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<td>Panpan Sun</td>
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<td>Vet Res</td>
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<td>Jiali Li</td>
<td>20957521</td>
<td>Cell Physiol Biochem</td>
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### Storage

- **Storage:** Store at -20ºC. Stable for one year after shipment.
- **Storage Buffer:** PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
- **Aliquoting is unnecessary for -20ºC storage**

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For technical support and original validation data for this product please contact:

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E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.
100K6 HepG2 cells were stained with 0.20ug TBP antibody (66166-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH.

Western blot analysis of TBP in various cell lines using Proteintech antibody 66166-1-Ig at a dilution of 1:8000 incubated at room temperature for 1.5 hours.

IP Result of anti-TBP (IP:66166-1-Ig, 3ug; Detection:66166-1-Ig 1:800) with HEK-293 cells lysate 1800ug.

Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 66166-1-Ig (TBP Antibody) at dilution of 1:650 (under 40x lens). heat mediated antigen retrieved with Tris-EDTA buffer pH 9.

Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 66166-1-Ig (TBP antibody) at dilution of 1:200 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L)