Anti-TATA binding protein TBP Antibody

HA500518

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IHC-P
Molecular Wt:	Predicted band size: 38 kDa

Description: The TATA-binding protein (TBP) is a general transcription factor that binds specifically to a DNA sequence called the TATA box. This DNA sequence is found about 30 base pairs upstream of the transcription start site in some eukaryotic gene promoters. TBP is a member of a small gene family of TBP-related factors. The first TBP-related factor (TRF/TRF1) was identified in the fruit fly Drosophila, but appears to be fly or insect-specific. Subsequently TBPL1/TRF2 was found in the genomes of many metazoans, whereas vertebrate genomes encode a third vertebrate family member, TBPL2/TRF3. In specific cell types or on specific promoters TBP can be replaced by one of these TBP-related factors, some of which interact with the TATA box similarly to TBP.

Immunogen: Recombinant protein within human TBP aa 140-339 / 339.

Positive control: Hela cell lysate, HCT116 cell lysate, 293T cell lysate, HepG2 cell lysate, MCF-7 cell lysate, Jurkat cell lysate, C2C12 cell lysate, NIH/3T3 cell lysate, RAW264.7 cell lysate, mouse testis tissue lysate, rat testis tissue lysate, human bladder carcinoma tissue, human testis tissue, human colon tissue, mouse stomach tissue.

Subcellular location: Nucleus.

Database links: SwissProt: P20226 Human | P29037 Mouse
Entrez Gene: 117526 Rat

Recommended Dilutions:

WB	1:1,000
IHC-P	1:2,000

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Immunogen affinity purified.

Images

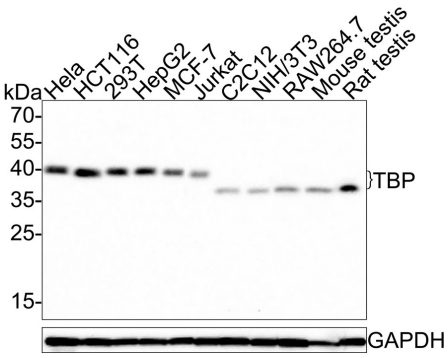

Fig1: Western blot analysis of TATA binding protein TBP on different lysates with Rabbit anti-TATA binding protein TBP antibody (HA500518) at 1/1,000 dilution.

Lane 1: Hela cell lysate (20 µg/Lane)
Lane 2: HCT116 cell lysate (20 µg/Lane)
Lane 3: 293T cell lysate (20 µg/Lane)
Lane 4: HepG2 cell lysate (20 µg/Lane)
Lane 5: MCF-7 cell lysate (20 µg/Lane)
Lane 6: Jurkat cell lysate (20 µg/Lane)
Lane 7: C2C12 cell lysate (20 µg/Lane)
Lane 8: NIH/3T3 cell lysate (20 µg/Lane)
Lane 9: RAW264.7 cell lysate (20 µg/Lane)
Lane 10: Mouse testis tissue lysate (40 µg/Lane)
Lane 11: Rat testis tissue lysate (40 µg/Lane)

Predicted band size: 38 kDa
Observed band size: 40/36 kDa

Exposure time: 3 minutes;

12% SDS-PAGE gel.

Proteins were transferred to a PVDF membrane and blocked with 5% NFDM/TBST for 1 hour at room temperature. The primary antibody (HA500518) at 1/1,000 dilution was used in 5% NFDM/TBST at room temperature for 2 hours. Goat Anti-Rabbit IgG - HRP Secondary Antibody (HA1001) at 1:300,000 dilution was used for 1 hour at room temperature.

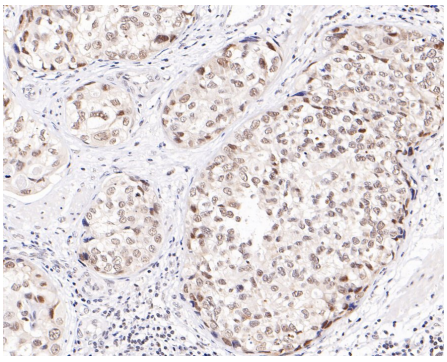

Fig2: Immunohistochemical analysis of paraffin-embedded human bladder carcinoma tissue with Rabbit anti-TATA binding protein TBP antibody (HA500518) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA500518) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

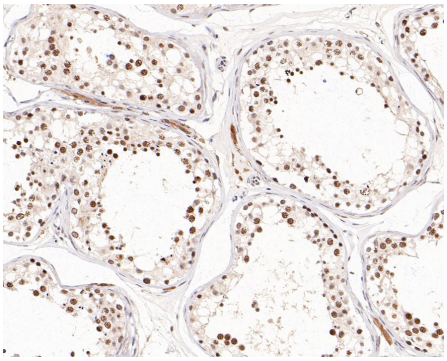

Fig3: Immunohistochemical analysis of paraffin-embedded human testis tissue with Rabbit anti-TATA binding protein TBP antibody (HA500518) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA500518) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

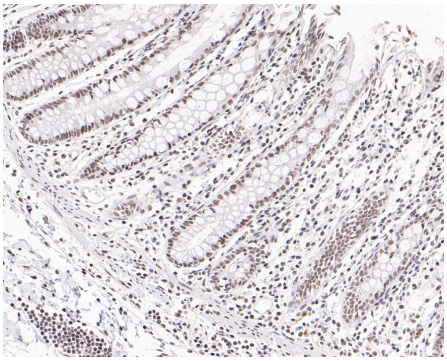

Fig4: Immunohistochemical analysis of paraffin-embedded human colon tissue with Rabbit anti-TATA binding protein TBP antibody (HA500518) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA500518) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

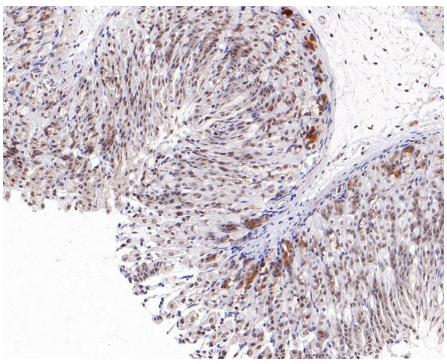

Fig5: Immunohistochemical analysis of paraffin-embedded mouse stomach tissue with Rabbit anti-TATA binding protein TBP antibody (HA500518) at 1/2,000 dilution.

The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0) (high pressure) for 2 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH_2O and PBS, and then probed with the primary antibody (HA500518) at 1/2,000 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

Background References

1. Wang H et al. Structures and implications of TBP-nucleosome complexes. Proc Natl Acad Sci U S A. 2021 Jul
2. Magri S et al. Digenic inheritance of STUB1 variants and TBP polyglutamine expansions explains the incomplete penetrance of SCA17 and SCA48. Genet Med. 2022 Jan