### For Research Use Only

# TBP Monoclonal antibody

Catalog Number:66166-1-lg 25 Publications



**Purification Method:** 

IHC: 1:325-1:1300

IF/ICC: 1:1000-1:4000

**Basic Information** 

Catalog Number: GenBank Accession Number: BC110341

66166-1-lg Protein A purification GeneID (NCBI): CloneNo.:

150ul, Concentration: 2000 ug/ml by 6908 2H3B2 Nanodrop:

**UNIPROT ID:** Recommended Dilutions: P20226 WB: 1:20000-1:100000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total Mouse Full Name: protein lysate

Isotype: TATA box binding protein IgG2a Calculated MW: Immunogen Catalog Number: 338 aa, 38 kDa

AG12383 Observed MW:

mouse/rat 33-36 kDa and human 37-

43kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, IP, ELISA

**Cited Applications:** 

Species Specificity:

human, mouse, rat, pig

Cited Species: human, mouse, rat, pig

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:

IP: HEK-293 cells.

WB: LNCaP cells, HSC-T6 cells, HEK-293 cells, pig liver tissue, HeLa cells, HepG2 cells, Jurkat cells, K-562

cells, NIH/3T3 cells, Neuro-2a cells

IHC: human liver cancer tissue, human breast cancer

tissue

IF/ICC: A431 cells, 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 preinitiation complex. As one of the few proteins in the preinitation 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**

Author	Pubmed ID	Journal	Application
Alexander K Kunisky	34644577	Cell Rep	WB
Jing Lu	36436207	Psychiatry Clin Neurosci	WB
Yu Chen	31770366	PLoS Biol	WB

Storage

Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

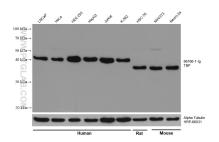
For technical support and original validation data for this product please contact: T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free

in USA), or 1(312) 455-8498 (outside USA)

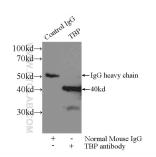
E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

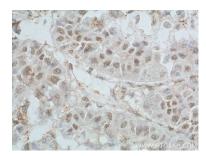
### **Selected Validation Data**



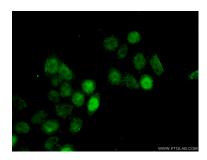
Various lysates were subjected to SDS PAGE followed by western blot with 66166-1-Ig (TBP antibody) at dilution of 1:200000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



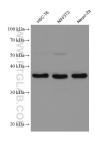
IP result of anti-TBP (IP:66166-1-Ig, 3ug; Detection:66166-1-Ig 1:800) with HEK-293 cells lysate 1800ug.



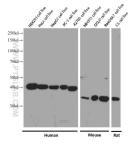
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 66166-1-Ig (TBP Antibody) at dilution of 1:650 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



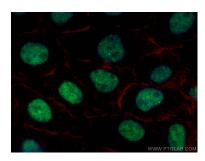
Immunofluorescent analysis of (10% Formaldehyde) fixed HeLa cells using 66166-1-Ig(TBP antibody) at dilution of 1:100 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



Various lysates were subjected to SDS PAGE followed by western blot with 66166-1-lg (TBP antibody) at dilution of 1:200000 incubated at room temperature for 1.5 hours.



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



Immunofluorescent analysis of (4% PFA) fixed A431 cells using TBP antibody (66166-1-lg, Clone: 2H3B2) at dilution of 1:2000 and Coralite® 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L), CL594-phalloidin (red).