

**Datasheet for 200-301-W44****TBP Antibody****Overview**

<b>Description:</b>	Anti-TBP (MOUSE) Monoclonal Antibody - 200-301-W44
<b>Item No.:</b>	200-301-W44
<b>Size:</b>	100 µg
<b>Applications:</b>	ChIP, WB
<b>Reactivity:</b>	Human
<b>Host Species:</b>	Mouse

**Product Details**

<b>Background:</b>	General transcription factor that functions at the core of the DNA-binding multiprotein factor TFIID. Binding of TFIID to the TATA box is the initial transcriptional step of the pre-initiation complex (PIC), playing a role in the activation of eukaryotic genes transcribed by RNA polymerase II. Component of the transcription factor SL1/TIF-IB complex, which is involved in the assembly of the PIC (preinitiation complex) during RNA polymerase I-dependent transcription. The rate of PIC formation probably is primarily dependent on the rate of association of SL1 with the rDNA promoter. SL1 is involved in stabilization of nucleolar transcription factor 1/UBTF on rDNA. Anti-TBP Antibody is ideal for research in Gene Expression and Transcription.
<b>Synonyms:</b>	TATA-box-binding protein, TATA sequence-binding protein, TATA-binding factor, TATA-box factor, Transcription initiation factor TFIID TBP subunit, GTF2D1, TF2D, TFIID
<b>Host Species:</b>	Mouse
<b>Clonality:</b>	Monoclonal
<b>Format:</b>	IgG1

**Target Details**

<b>Gene Name:</b>	TBP
<b>Reactivity:</b>	Human
<b>Immunogen Type:</b>	Conjugated Peptide

<b>Immunogen:</b>	Anti-TBP Antibody was produced in mice by repeated immunizations containing an amino acid sequence from the N-terminus of human TBP.
<b>Purity/Specificity:</b>	Anti-TBP Antibody was purified by ammonium sulphate precipitation followed by dialysis. Cross reactivity with other species was not tested.
<b>Relevant Links:</b>	<ul style="list-style-type: none"><li>• <a href="#">UniProtKB - P20226</a></li><li>• <a href="#">GeneID - 6908</a></li><li>• <a href="#">NCBI - NP_001165556.1</a></li></ul>

## Application Details

<b>Tested Applications:</b>	ChIP, WB
<b>Application Note:</b>	Anti-TBP Antibody is tested for Chromatin Immunoprecipitation and Sequencing, and Western Blots. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately 38 kDa in the appropriate cell lysate or extract.
<b>Assay Dilutions:</b>	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
<b>ChIP:</b>	4-5 µg per IP
<b>WB:</b>	1:200 - 1:2,000

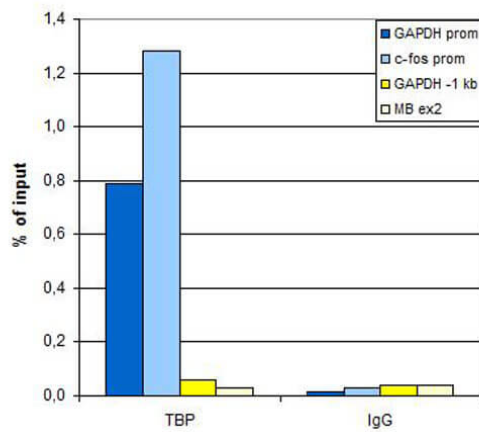
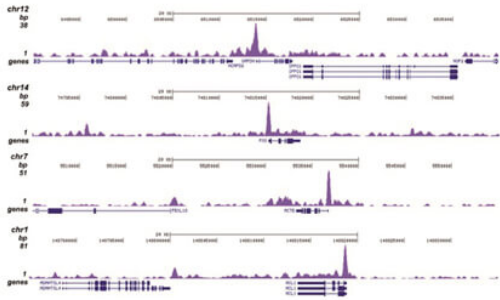
## Formulation

<b>Physical State:</b>	Liquid (sterile filtered)
<b>Concentration:</b>	8 mg/ml by UV absorbance at 280 nm
<b>Buffer:</b>	0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2
<b>Preservative:</b>	0.05% (w/v) Sodium Azide
<b>Stabilizer:</b>	None

## Shipping & Handling

<b>Shipping Condition:</b>	Dry Ice
<b>Storage Condition:</b>	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
<b>Expiration:</b>	Expiration date is one (1) year from date of receipt.

## Images

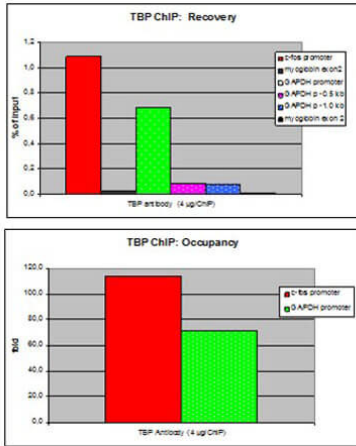


### ChIP

Chromatin Immunoprecipitation was performed with 5 µg of anti-TBP antibody on sheared chromatin from 1 million HeLaS3 cells on the IP-Star automated system. The IP'd DNA was analyzed by QPCR with optimized PCR primer pairs for the promoters of the active GAPDH and c-fos genes, used as positive control targets, and for a region 1 kb upstream of the GAPDH promoter and the coding region of the inactive MB gene, used as negative control targets (figure A). The IP'd DNA was subsequently analyzed with an Illumina Genome Analyzer. The 36 bp tags were aligned to the human genome using the ELAND algorithm. Figure shows the peak distribution in 50 kb regions surrounding the GAPDH, c-fos, ACTB and MCL1 genes (figure B, C, D and E, respectively). These results clearly show a localization of TBP at the promoters of actively transcribed genes.

### ChIP

Chromatin Immunoprecipitation was performed with 5 µg of anti-TBP antibody on sheared chromatin from 1 million HeLaS3 cells on the IP-Star automated system. The IP'd DNA was analysed by QPCR with optimized PCR primer pairs for the promoters of the active GAPDH and c-fos genes, used as positive control targets, and for a region 1 kb upstream of the GAPDH promoter and the coding region of the inactive MB gene, used as negative control targets (figure A). The IP'd DNA was subsequently analyzed with an Illumina Genome Analyzer. The 36 bp tags were aligned to the human genome using the ELAND algorithm. Figure shows the peak distribution in 50 kb regions surrounding the GAPDH, c-fos, ACTB and MCL1 genes (figure B, C, D and E, respectively). These results clearly show a localisation of TBP at the promoters of actively transcribed genes.



### ChIP

ChIP assays were performed using U2OS cells, TBP antibody, and optimized primer sets for qPCR. Sheared chromatin from 1x10<sup>6</sup> cells and 4 µg of antibody were used per experiment. QPCR was performed with primers for the promoter of the c-fos and GAPDH genes, a region 0.5 and 1 kb upstream of the GAPDH promoter, and for exon 2 of the myoglobin gene as a negative control. This figure shows the recovery (the relative amt of IP DNA compared to input DNA) and the occupancy (ratio +/- control target). These results demonstrate the occupancy of both promoters by TBP.

### Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.