abcam

Product datasheet

Anti-TATA binding protein TBP antibody [1TBP18] - ChIP Grade ab818

39 Abreviews 257 References 2 Images

Overview

Product name	Anti-TATA binding protein TBP antibody [1TBP18] - ChIP Grade
Description	Mouse monoclonal [1TBP18] to TATA binding protein TBP - ChIP Grade
Host species	Mouse
Tested applications	**Suitable for:** ICC, IHC-Fr, IP, ICC/IF, IHC-P, ChIP/Chip, EMSA, ELISA, Flow Cyt, WB, ChIP
Species reactivity	**Reacts with:** Mouse, Rat, Human **Does not react with:** Saccharomyces cerevisiae, Xenopus laevis, Drosophila melanogaster, Silk worm
Immunogen	Synthetic peptide corresponding to Human TATA binding protein TBP.
Epitope	Within amino acid residues 1-20 of human, mouse and rat TBP. The specific epitope for this antibody is accessible when the C-terminal domain of TBP is removed or when TBP is complexed with DNA.
General notes	This product was changed from ascites to tissue culture supernatant on 19/12/2018. Please note that the dilutions may need to be adjusted accordingly. If you have any questions please do not hesitate to contact our scientific support team. The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide
Purity	Protein G purified

Purification notes	Purified from TCS
Clonality	Monoclonal
Clone number	1TBP18
Isotype	IgG1

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab818 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

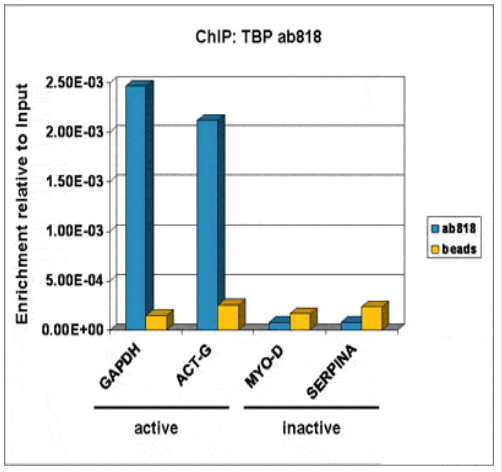
Application	Abreviews	Notes
ICC	★★★★☆ (1)	Use at an assay dependent concentration.
IHC-Fr	★★★★☆ (1)	Use at an assay dependent concentration.
IP	★★★★★ (2)	Use at an assay dependent concentration.
ICC/IF	★★★★☆ (4)	Use at an assay dependent concentration.
IHC-P	★★★★☆ (1)	Use at an assay dependent concentration.
ChIP/Chip	★★★★☆ (1)	Use at an assay dependent concentration.
EMSA		Use at an assay dependent concentration.
ELISA	★★★★★ (2)	Use at an assay dependent concentration. We recommend Rabbit Anti-Mouse IgG H&L (Alkaline Phosphatase) (**ab6729**) secondary antibody.
Flow Cyt		Use 1µg for 10^6 cells. **ab170190** and **ab81216** - Mouse monoclonal IgG1, are suitable for use as an isotype control with this antibody. We recommend Goat Anti-Mouse IgG H&L (DyLight® 488) preadsorbed (**ab96879**) secondary antibody
WB	★★★★☆ (24)	Use at an assay dependent concentration. Predicted molecular weight: 38 kDa. PubMed: 23767827
ChIP	★★★★☆ (2)	Use 5-10 µg for 25 µg of chromatin.

Target

Function 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.
Tissue specificity	Widely expressed, with levels highest in the testis and ovary.
Involvement in disease	Defects in TBP are the cause of spinocerebellar ataxia type 17 (SCA17) [MIM:607136]. Spinocerebellar ataxia is a clinically and genetically heterogeneous group of cerebellar disorders. Patients show progressive incoordination of gait and often poor coordination of hands, speech and eye movements, due to degeneration of the cerebellum with variable involvement of the brainstem and spinal cord. SCA17 is an autosomal dominant cerebellar ataxia (ADCA) characterized by widespread cerebral and cerebellar atrophy, dementia and extrapyramidal signs. The molecular defect in SCA17 is the expansion of a CAG repeat in the coding region of TBP. Longer expansions result in earlier onset and more severe clinical manifestations of the disease.
Sequence similarities	Belongs to the TBP family.
Cellular localization	Nucleus.

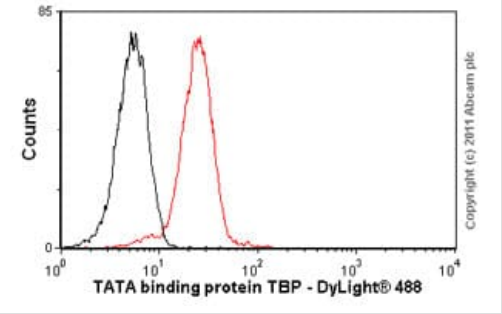
Images



ChIP - Anti-TATA binding protein TBP antibody [1TBP18] - ChIP Grade (ab818)

Chromatin was prepared from U2OS cells according to the Abcam X-ChIP protocol. Cells were fixed with formaldehyde for 10 min. The ChIP was performed with 25 µg of chromatin, 8 µg of ab818 (blue), and 20 µl of Protein A/G sepharose beads. No antibody was added to the beads control (yellow). The last wash was performed with final wash buffer containing 250 mM NaCl. The immunoprecipitated DNA was quantified by real time PCR (Taqman and sybr green approach). Primers and probes are located in the core promoter region of the genes.

This image was generated using the ascites version of the product.



Flow Cytometry - Anti-TATA binding protein TBP antibody [1TBP18] - ChIP Grade (ab818)

Overlay histogram showing HeLa cells stained with ab818 (red line). The cells were fixed with 100% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab818, 1µg/1x10^6 cells) for 30 min at 22°C. The secondary antibody used was Goat Anti-Mouse IgG H&L (DyLight® 488) preadsorbed (**ab96879**) secondary antibody at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was Mouse IgG1 [ICIGG1] (**ab91353**, 2µg/1x10^6 cells) used under the same conditions. Acquisition of >5,000 events was performed.

This image was generated using the ascites version of the product.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.com/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors