# abcam

# Product datasheet

# Recombinant Human TATA binding protein TBP ab81897

1 References 2 Images

**Description** 

**Product name** Recombinant Human TATA binding protein TBP

**Biological activity** 1 unit equals 1 nanogram of purified protein.

**Purity** > 95 % SDS-PAGE.

Escherichia coli **Expression system** 

Accession NM 003194

**Protein length** Full length protein

**Animal free** No

Recombinant **Nature** 

**Species** Human

Sequence MDQNNSLPPY AQGLASPQGA MTPGIPIFSP

MMPYGTGLTP QPIQ NTNSL SILEEQQRQQ

QQQQQAVAA AAV QQSTSQ QATQGTSGQA

PQLFHSQTLT TAPLPGTTPL YPSPMTPMTP ITPATPASES SG IVPQLQN IVSTVNLGCK LDLKTIALRA RNAEYNPKRF AAVIMRIREP RTTALIFSSG K MVCTGAKS EEQSRLAARK

YARVVQKLGF PAKFLDFKIQ NMVGSCDVKF

PIRLEGLVLT HQQFSSYEP ELFPGLIYRM IKPRIVLLIF VSGKVVLTGA KVRAEIYEAF ENIYPILKG FRKTT

Predicted molecular weight 39 kDa

His tag N-Terminus **Tags** 

**Specifications** 

**Amino acids** 

Our Abpromise guarantee covers the use of ab81897 in the following tested applications.

1 to 339

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

**Applications** Gel Supershift Assays

SDS-PAGE

Western blot

**EMSA** 

Form Liquid

Additional notes 1 unit equals 1 nanogram of purified protein.

#### **Preparation and Storage**

Stability and Storage Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.9

Constituents: 0.75% Potassium chloride, 0.0154% DTT, 0.316% Tris HCI, 0.00584% EDTA, 20%

Glycerol (glycerin, glycerine)

#### **General Info**

**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.

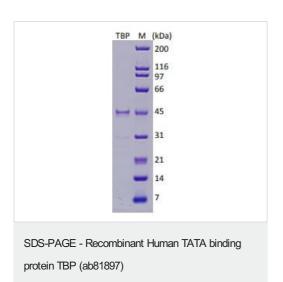
Sequence similarities

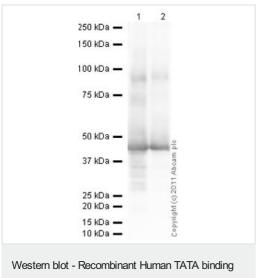
Belongs to the TBP family.

**Cellular localization** 

Nucleus.

# **Images**





protein TBP (ab81897)

All lanes: Anti-TATA binding protein TBP antibody - Nuclear Loading Control and ChIP Grade (ab63766) at 1  $\mu g/ml$ 

Lane 1: Recombinant Human TATA binding protein TBP (ab81897) at 0.1 µg

Lane 2: Recombinant Human TATA binding protein TBP (ab81897) at 0.01 µg

### Secondary

All lanes: Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab97080) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Exposure time: 10 seconds

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

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