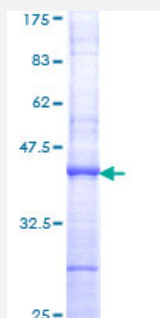


TBP (Human) Recombinant Protein (Q01)

Catalog # H00006908-Q01

Size 25 ug, 10 ug

Applications



Specification

Product Description	Human TBP partial ORF (NP_003185, 227 a.a. - 339 a.a.) recombinant protein with GST-tag at N-terminal.
Sequence	EEQSRLAARKYARVVQKLGFPAKFLDFKIQNMVGSCDVKFPIRLEGLVLTHQQFSSYEPELFPGLIYRMIKPRIVLLIFVSGKVVLTGAKVRAEYEAFFENIYPILKGFRKTT
Host	Wheat Germ (in vitro)
Theoretical MW (kDa)	38.17
Interspecies Antigen Sequence	Mouse (100); Rat (100)
Preparation Method	in vitro wheat germ expression system
Purification	Glutathione Sepharose 4 Fast Flow
Quality Control Testing	12.5% SDS-PAGE Stained with Coomassie Blue.
Storage Buffer	50 mM Tris-HCl, 10 mM reduced Glutathione, pH=8.0 in the elution buffer.
Storage Instruction	Store at -80°C. Aliquot to avoid repeated freezing and thawing.
Note	Best use within three months from the date of receipt of this protein.

Applications

- Enzyme-linked Immunoabsorbent Assay
- Western Blot (Recombinant protein)
- Antibody Production
- Protein Array

Gene Info — TBP

Entrez GeneID	6908
GeneBank Accession#	NM_003194
Protein Accession#	NP_003185
Gene Name	TBP
Gene Alias	GTF2D, GTF2D1, MGC117320, MGC126054, MGC126055, SCA17, TFIIID
Gene Description	TATA box binding protein
Omim ID	168600 600075 607136
Gene Ontology	Hyperlink
Gene Summary	Initiation of transcription by RNA polymerase II requires the activities of more than 70 polypeptides. The protein that coordinates these activities is transcription factor IID (TFIIID), which binds to the core promoter to position the polymerase properly, serves as the scaffold for assembly of the remainder of the transcription complex, and acts as a channel for regulatory signals. TFIIID is composed of the TATA-binding protein (TBP) and a group of evolutionarily conserved proteins known as TBP-associated factors or TAFs. TAFs may participate in basal transcription, serve as coactivators, function in promoter recognition or modify general transcription factors (GTFs) to facilitate complex assembly and transcription initiation. This gene encodes TBP, the TATA-binding protein. A distinctive feature of TBP is a long string of glutamines in the N-terminal. This region of the protein modulates the DNA binding activity of the C terminus, and modulation of DNA binding affects the rate of transcription complex formation and initiation of transcription. Mutations that expand the number of CAG repeats encoding this polyglutamine tract, and thus increase the length of the polyglutamine string, are associated with spinocerebellar ataxia 17, a neurodegenerative disorder classified as a polyglutamine disease. [provided by RefSeq]
Other Designations	OTTHUMP00000017703

Publication Reference

- [Active bacterial modification of the host environment through RNA Polymerase II inhibition.](#)

Inès Ambite, Nina A Filenko, Elisabed Zaldastanishvili, Daniel Sc Butler, Thi Hien Tran, Arunima Chaudhuri, Parisa Esmaeili, Shahram Ahmadi, Sanchari Paul, Björn Wullt, Johannes Putze, Swaine L Chen, Ulrich Dobrindt, Catharina Svanborg.

The Journal of Clinical Investigation 2021 Feb; 131(4):e140333.

Application: GSA, Recombinant proteins

- [Protein binding protection in combination with DNA masking for sensitive and reliable transcription factor detection.](#)

Xu X, Wang L, Zhu D, Wang Y, Jiang W.

Talanta 2018 Aug; 186:293.

Application: Func, Recombinant protein

- [Target binding protection mediated rolling circle amplification for sensitive detection of transcription factors.](#)

Zhang K, Wang L, Zhao H, Jiang W.

Talanta 2018 Mar; 179:331.

Application: Func, Probe

- [Colocalization recognition-activated cascade signal amplification strategy for ultrasensitive detection of transcription factors.](#)

Zhua D, Wang L, Xu X, Jiang W.

Biosensors & Bioelectronics 2016 Sep; 89:978.

Application: Func, Human, HeLa cells

- [Electrochemical impedance probing of transcriptional TATA binding protein based on TATA box site-specific binding.](#)

Chang H, Li J.

Electrochemistry Communications 2009 Nov; 11(11):2101.

Application: Func, Compounds

Pathway

- [Basal transcription factors](#)

Disease

- [Alzheimer disease](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Cerebellar Ataxia](#)
- [Chronic Disease](#)
- [Diabetes Mellitus](#)
- [Dystonic Disorders](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)
- [Huntington disease](#)
- [Multiple System Atrophy](#)
- [Myoclonic Cerebellar Dyssynergia](#)
- [Neurodegenerative Diseases](#)
- [Parkinson disease](#)
- [Parkinsonian Disorders](#)
- [Restless Legs Syndrome](#)
- [Schizophrenia](#)
- [Spinocerebellar ataxia](#)
- [Spinocerebellar Ataxias](#)