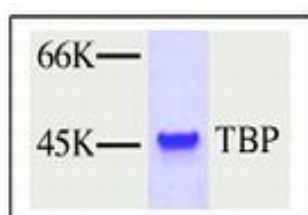


TBP

TATA box Binding Protein

human, recombinant, *E. coli*

Cat. No.	Amount
PR-703	10 µg



For *in vitro* use only!
Quality guaranteed for 12 months
Store at -80 °C

Avoid freeze/thaw cycles

Form

Liquid. Supplied in 20 mM Tris-HCl pH 8.0, 100 mM KCl, 0.2 mM EDTA, 1 mM DTT and 20% glycerol.

Activity

1 ng is the amount sufficient for a gel mobility shift assay in a 20 µl reaction. 10 ng are sufficient for a 25 µl reconstituted transcription reaction and 100 ng are sufficient for a protein-protein interaction assay detected by immuno-blot system.

Molecular Weight

46 kDa

Purity

> 95% by SDS-PAGE

Description

The TATA-binding protein (TBP) is believed to function as an essential factor of the general transcription machinery and to be involved in transcription by all three eukaryotic RNA Polymerases (Pol I, II, and III).

TBP specifically binds to the TATA element at the promoter region and interacts with numerous transcription factors, including TBP-associated factors (TAFs), activators, and some tumor suppressor proteins.

Isolated from an *E. coli* strain that carries the coding sequence for human TBP under the control of T7 promoter.

TBP can be used for:

- 1) *in vitro* transcription;
- 2) gel mobility shift assay in the presence of double-stranded oligonucleotide containing a TATA element;
- 3) for *in vitro* footprinting assay in the presence of TATA-containing DNA fragment and
- 4) for protein-protein interaction assay.

Protein is greater than 95% homogeneous and contains no detectable proteases, DNase, and RNase activity.

Selected References:

- Horikoshi *et al.* (1988) Transcription factor ATF interacts with the TATA factor to facilitate establishment of a preinitiation complex. *Cell* **54**:1033.
- Hernandez (1993) TBP, a universal eukaryotic transcription factor? *Genes & Dev.* **7**:1291.
- Hoffmann *et al.* (1991) Purification of his-tagged proteins in non-denaturing conditions suggests a convenient method for protein interaction studies. *Nucleic Acids Res.* **19**:6337.
- Roeder *et al.* (1994) The high mobility group protein HMG1 can reversibly inhibit class II gene transcription by interaction with the TATA-binding protein. *J. Biol. Chem.* **269**:17136.