

Recombinant TBP protein

Catalog No: 31246

Expressed In: *E. coli*

Quantity: 10 µg

Concentration: 0.1 µg/µl

Source: Human

Buffer Contents: 10 µg of recombinant protein supplied at a concentration of 0.1 µg/µl in 20 mM Tris-HCl, pH 7.3, 100 mM KCl, 0.2 mM EDTA and 20% glycerol.

Background: TBP (also known as TATA box binding protein, GTF2D, transcription initiation factor TFIID TBP subunit, TATA-binding factor, TF2D, TFIID or SCA17). RNA polymerase II is an enzyme found in eukaryotic cells composed of 12 subunits that catalyzes transcription of DNA. Transcription consists of three phases: initiation, elongation and termination. Transcription initiation involves TFIID, which is composed of TATA-binding protein (TBP) and TBP-associated factors (TAFs), as part of the RNA polymerase II pre-initiation complex (PIC). TBP binds to the TATA box sequence, which is located upstream of the transcription start site in some eukaryotic gene promoters, and helps position RNA polymerase II. TBP contains a string of glutamines at the N-terminus which affect DNA binding and the rate of transcription complex formation. TBP is also associated with RNA polymerase I and RNA polymerase III.

Protein Details: Recombinant TBP protein was expressed in *E. coli* as the full-length human protein (accession number NP_003185) with an N-terminal polyhistidine tag. The molecular weight of the protein is ~40 kDa.

Application Notes: Recombinant TBP protein is suitable for use in *in vitro* transcription assays. A recommended starting point is 1-5 ng recombinant protein per reaction.

Storage and Guarantee: This product is for research use only and is not for use in diagnostic procedures. This product is guaranteed for 6 months from date of arrival.