Recombinant TF2B protein (His tag)

Catalog Number	534503
Synonyms	General transcription factor TFIIB
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	O16991
Gene ID	178544
Molecular Weight	Predictes a molecular mass of 34.76 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 35 kDa band.

Product Information

Sequence Region	1-306
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>86%, by SDS-PAGE with Coomassie Brilliant Blue staining.
Endotoxin	Not tested.
Activity	Not tested.
Stability	Samples are stable for up to twelve months from date of receipt at -70℃
Protein Construction	DNA encoding 1-306 aa (O16991) were fused with 6His tag.

Storage & Handling

Reconstitution	Reconstitute at 0.25 μg/μl in sterile water for short-term storage. Reconstitution with 50% glycerol solution is recommended for longer term storage (see Stability and Storage for more details). If a different concentration is needed for your purposes please adjust the reconstitution volume as required (please note: the ion concentration of the final solution will vary according to the volume used). Note: Centrifuge vial before opening. When reconstituting, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution.
Storage	Store it under sterile conditions at -20℃ to -80℃. It is recommended that the protein be aliquoted for optimal storage. Avoid repeated freeze-thaw cycles.
Shipping	In general, recombinant proteins are provided as lyophilized powder which are shipped at ambient temperature. Bulk packages of recombinant proteins are provided as frozen liquid. They are shipped out with blue ice unless customers require otherwise.

Description

Description	Recombinant Transcription Initiation Factor IIB (General Transcription Factor TFIIB) fragment from Caenorhabditis elegans, encompassing amino acids 1-306. This high-quality protein is designed for structural and biochemical studies, offering a stable and soluble unit ideal for investigating transcription initiation mechanisms in RNA polymerase II-mediated gene expression. Transcription Initiation Factor IIB (TFIIB) is a general transcription factor essential for transcription initiation by RNA polymerase II. It functions in pre-initiation complex formation and facilitates Pol II recruitment to promoter DNA, playing a critical role in the regulation of gene expression. In Caenorhabditis elegans, TFIIB is vital for early embryonic development, as demonstrated by genetic studies. The protein localizes to the nucleus, where it participates in the core transcriptional machinery. This recombinant fragment represents a computationally optimized, stable region of the protein, enabling detailed analysis of its structural and functional properties in transcription research.