Recombinant T2EB protein (His tag)

Catalog Number	537661
Synonyms	TFIIE-beta; General transcription factor IIE subunit 2
Species	Human
Expression System	E. coli
Accession	P29084
Molecular Weight	Predictes a molecular mass of 21.60 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 24 kDa band.

Product Information

Sequence Region	73-243
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 73-243 aa (P29084) 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	This product offers a recombinant fragment (residues 73-243) of the human Transcription Initiation Factor IIE subunit beta (TFIIE-beta), a key component in RNA polymerase II-mediated transcription initiation. The fragment is engineered for stability and solubility, making it ideal for structural studies and biochemical assays. The full-length TFIIE-beta, encoded by the GTF2E2 gene, plays a critical role in transcription initiation by recruiting the TFIIH complex to the pre-initiation complex and stimulating its RNA polymerase II C-terminal domain kinase and DNA-dependent ATPase activities. Together with TFIIH, it facilitates promoter clearance by RNA polymerase II, a fundamental step in gene expression. TFIIE-beta is localized to the nucleus, underscoring its direct involvement in transcriptional regulation within this cellular compartment.