Recombinant TCEA3 protein (His tag)

Catalog Number	549436
Synonyms	Transcription elongation factor S-II protein 3; Transcription elongation factor TFIIS.h
Species	Human
Expression System	E. coli
Accession	O75764
Molecular Weight	Predictes a molecular mass of 20.62 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 22 kDa band.

Product Information

Sequence Region	182-348
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 182-348 aa (O75764) 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	Introducing the recombinant TCEA3 protein fragment (residues 182-348), derived from the human Transcription Elongation Factor A Protein 3. This fragment is expertly engineered to encompass the essential TFIIS central domain, making it an ideal tool for studying transcription elongation mechanisms and RNA polymerase II regulation in vitro. Transcription Elongation Factor A Protein 3 (TCEA3) is a crucial nuclear protein in humans that facilitates efficient RNA polymerase II transcription elongation. It specifically enables RNA polymerase II to bypass template-encoded arresting sites where transcription complexes would normally become trapped. TCEA3 achieves this by cleaving the nascent transcript, allowing elongation to resume from the new 3'-terminus. This protein is exclusively localized to the nucleus, where it performs its essential role in maintaining transcriptional efficiency and fidelity. The provided fragment contains the functionally critical TFIIS central domain (residues 187-303), which is responsible for the protein's core transcriptional regulatory activities.