Recombinant TCEA2 protein (His tag)

Catalog Number	540350
Synonyms	Testis-specific S-II; Transcription elongation factor S-II protein 2; Transcription elongation factor TFIIS.l
Species	Human
Expression System	E. coli
Accession	Q15560
Molecular Weight	Predictes a molecular mass of 20.43 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 21 kDa band.

Product Information

Sequence Region	135-299
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 135-299 aa (Q15560) 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 Human TCEA2 Protein Fragment (residues 135-299) is a high-purity, functional fragment encompassing the TFIIS central domain of Transcription Elongation Factor A Protein 2. This product is an essential tool for studying transcription elongation mechanisms, enabling researchers to investigate RNA polymerase II progression and template-encoded arrest rescue in vitro. Transcription Elongation Factor A Protein 2 (TCEA2), also known as Testis-specific S-II, is a nuclear protein critical for efficient RNA polymerase II transcription elongation. It functions by cleaving nascent transcripts at template-encoded arresting sites, allowing RNA polymerase II to resume elongation from new 3'-termini and preventing locked ternary complex formation. This mechanism is vital for overcoming transcriptional pausing and ensuring complete gene expression, with implications for understanding transcriptional regulation in cellular processes.