Recombinant THOC4 protein (His tag)

Catalog Number	547634
Synonyms	Tho4; Ally of AML-1 and LEF-1; Aly/REF export factor; Transcriptional coactivator Aly/REF; bZIP-enhancing factor BEF
Species	Human
Expression System	E. coli
Accession	Q86V81
Molecular Weight	Predictes a molecular mass of 10.15 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 10 kDa band.

Product Information

Sequence Region	105-182
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 105-182 aa (Q86V81) 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 THO complex subunit 4 (ALYREF) Fragment (aa 105-182) is a high-purity protein fragment encompassing the complete RRM domain, designed for studying mRNA export mechanisms, transcription coactivation, and RNA-binding functions in nuclear processes. The full-length ALYREF protein functions as a critical mRNA export adapter within the TREX complex, coupling mRNA transcription, processing, and nuclear export. It specifically binds spliced mRNAs and m5C-modified mRNAs, facilitating their transport to the cytoplasm via the TAP/NXF1 pathway. ALYREF also acts as a transcriptional coactivator by promoting bZIP transcription factor dimerization and is involved in transcription elongation and genome stability. Located primarily in nuclear speckles and perispeckles, it shuttles to the cytoplasm as part of mRNA complexes and plays an essential role in viral mRNA export for pathogens like Kaposi's sarcoma-associated herpesvirus.