Recombinant I4E1B protein (His tag)

Catalog Number	550584
Species	Human
Expression System	E. coli
Accession	A6NMX2
Molecular Weight	Predictes a molecular mass of 23.01 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 23 kDa band.

Product Information

Sequence Region	58-242
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 58-242 aa (A6NMX2) 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 Eukaryotic Translation Initiation Factor 4E Type 1B (EIF4E1B) Fragment (residues 58-242) is a high-quality protein product designed for structural and biochemical studies. This 185-amino acid fragment, computationally selected for stability and solubility, retains key functional regions essential for investigating mRNA cap recognition and translation initiation mechanisms. The full-length Eukaryotic Translation Initiation Factor 4E Type 1B (EIF4E1B) plays a critical role in protein synthesis initiation by recognizing and binding to the 7-methylguanosine cap structure of mRNA. This binding facilitates ribosome attachment through unwinding of mRNA secondary structures, enabling efficient translation. While subcellular localization data is not specified, its function underscores its importance in regulating gene expression and cellular protein production pathways.