Recombinant EIF3A protein (His tag)

Catalog Number	538042
Synonyms	eIF3a; Eukaryotic translation initiation factor 3 subunit 10; eIF-3-theta; eIF3 p167; eIF3 p180; eIF3 p185
Species	Human
Expression System	E. coli
Accession	Q14152
Molecular Weight	Predictes a molecular mass of 22.74 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 30 kDa band.

Product Information

Sequence Region	679-843
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 679-843 aa (Q14152) 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 eIF3a Fragment (residues 679-843) is a high-purity, stable protein fragment derived from the Eukaryotic Translation Initiation Factor 3 Subunit A. This 165-amino acid fragment is ideal for structural studies, biochemical assays, and investigating mechanisms of translation initiation and viral IRES-mediated protein synthesis. Eukaryotic Translation Initiation Factor 3 Subunit A (eIF3a) is a critical RNA-binding component of the eIF-3 complex, essential for multiple steps in protein synthesis initiation. The full-length protein facilitates formation of the 43S pre-initiation complex, promotes mRNA recruitment and scanning, and regulates ribosomal recycling. eIF3a specifically targets mRNAs involved in cell proliferation, differentiation, and apoptosis, exerting both translational activation and repression. Additionally, it supports initiation of translation on type-1 viral internal ribosomal entry sites (IRESs) for pathogens including HCV, poliovirus, and enterovirus 71, and participates in ribosomal termination-reinitiation during FCV infection. eIF3a is localized to the cytoplasm where it performs its essential functions in translation regulation.