Recombinant EIF3K protein (His tag)

Catalog Number	548447
Synonyms	eIF3k; Eukaryotic translation initiation factor 3 subunit 12; Muscle-specific gene M9 protein; PLAC-24; eIF-3 p25; eIF-3 p28
Species	Human
Expression System	E. coli
Accession	Q9UBQ5
Molecular Weight	Predictes a molecular mass of 26.58 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	2-218
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 2-218 aa (Q9UBQ5) 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 EIF3K (eIF3k) Fragment (aa 2-218) – a high-purity protein fragment encompassing the complete PCI domain, designed for investigating eukaryotic translation initiation mechanisms and domain-specific functions in cell proliferation and protein synthesis regulation. Eukaryotic translation initiation factor 3 subunit K (eIF3k) is an essential component of the eIF-3 complex, which plays a critical role in multiple stages of protein synthesis initiation. The complex facilitates 40S ribosome association and promotes the assembly of the 43S pre-initiation complex, mRNA recruitment, and scanning for AUG start codon recognition. Additionally, eIF3 is involved in ribosomal recycling and prevents premature ribosomal subunit joining. It selectively regulates translation of mRNAs involved in cell proliferation, differentiation, and apoptosis, utilizing RNA stem-loop interactions for both activation and repression. The protein localizes to both the nucleus and cytoplasm, reflecting its dynamic role in translational control. This recombinant fragment spans residues 2-218 and includes the full PCI domain, enabling focused studies on domain-mediated functions within translation initiation pathways.