Recombinant EIF2A protein (His tag)

Catalog Number	543541
Synonyms	eIF-2A; 65 kDa eukaryotic translation initiation factor 2A
Species	Human
Expression System	E. coli
Accession	Q9BY44
Molecular Weight	Predictes a molecular mass of 56.88 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 57 kDa band.

Product Information

Sequence Region	1-497
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>88%, 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 1-497 aa (Q9BY44) 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 2A (eIF-2A) Fragment (1-497) is a high-quality protein product designed for structural and biochemical studies. This 497-amino acid fragment represents a stable and soluble unit of eIF-2A, optimized for research applications investigating its role in mRNA-specific translation initiation. Eukaryotic translation initiation factor 2A (eIF-2A) functions in the early steps of protein synthesis for a specific subset of mRNAs. Unlike the eIF-2 complex that binds methionyl-tRNAi to 40S ribosomal subunits in a GTP-dependent manner, eIF-2A directs this binding in a codon-dependent fashion, highlighting its unique mechanism in translation initiation. This protein plays a specialized role in the protein synthesis machinery, making it an important target for understanding regulated translation processes in human cells.