Recombinant IF2GL protein (His tag)

Catalog Number	549216
Synonyms	Eukaryotic translation initiation factor 2 subunit gamma A; eIF-2-gamma A; eIF-2gA
Species	Human
Expression System	E. coli
Accession	Q2VIR3
Molecular Weight	Predictes a molecular mass of 52.76 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 53 kDa band.

Product Information

Sequence Region	2-472
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 2-472 aa (Q2VIR3) 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	Introducing the recombinant protein fragment of Eukaryotic translation initiation factor 2 subunit 3B (EIF2S3B), encompassing amino acids 2-472. This 471-amino acid fragment includes the complete tr-type G domain, making it an ideal reagent for investigating the specific mechanisms of eukaryotic translation initiation and GTP-binding functions in a purified, functional context. Eukaryotic translation initiation factor 2 subunit 3B (EIF2S3B) is a crucial component of the eIF2 complex, which plays a fundamental role in the early stages of protein synthesis. As described in UniProtKB (Q2VIR3), this protein forms a ternary complex with GTP and initiator tRNA, binds to the 40S ribosomal subunit, and facilitates mRNA binding to form the 43S pre-initiation complex. Following GTP hydrolysis, eIF2 releases as an eIF2-GDP binary complex, requiring recycling by eIF-2B for subsequent initiation rounds. This protein is essential for regulating translation initiation in human cells, with implications for understanding cellular protein synthesis mechanisms and related pathological conditions.