Recombinant EF1A2 protein (His tag)

Catalog Number	542559
Synonyms	EF-1-alpha-2; Eukaryotic elongation factor 1 A-2; eEF1A-2; Statin-S1
Species	Human
Expression System	E. coli
Accession	Q05639
Molecular Weight	Predictes a molecular mass of 52.00 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 52 kDa band.

Product Information

Sequence Region	2-463
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 2-463 aa (Q05639) 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 Elongation Factor 1-alpha 2 (EF-1-alpha-2) Fragment (residues 2-463) is a high-purity protein designed for studying GTP-dependent translation elongation mechanisms. This fragment fully encompasses the tr-type G domain, making it an ideal tool for investigating specific functional domains in protein synthesis research. Elongation Factor 1-alpha 2 (EEF1A2) is a crucial translation elongation factor that catalyzes the GTP-dependent binding of aminoacyl-tRNA to the ribosomal A-site during protein synthesis elongation. The protein facilitates codon-anticodon base pairing, which promotes GTP hydrolysis and subsequent accommodation of aminoacyl-tRNA into the ribosome, enabling the transfer and extension of growing polypeptide chains through ribosome-catalyzed peptide bond formation. In human cells, this protein localizes to the endoplasmic reticulum membrane, positioning it at a key site for protein synthesis and processing in the secretory pathway.