Recombinant EF1D protein (His tag)

Catalog Number	544541
Synonyms	EF-1-delta; Antigen NY-CO-4
Species	Human
Expression System	E. coli
Accession	P29692
Molecular Weight	Predictes a molecular mass of 14.38 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 15 kDa band.

Product Information

Sequence Region	2-117
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 2-117 aa (P29692) 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-delta (EF-1-delta, Antigen NY-CO-4) Fragment (residues 2-117) is a stable and soluble protein unit designed for structural and biochemical studies, supporting research into translation regulation and heat shock response mechanisms. Elongation Factor 1-delta (EF-1-delta), encoded by the EEF1D gene, plays a critical role in protein synthesis regulation. Isoform 1 collaborates with EF-1-beta to stimulate the exchange of GDP for GTP on EF-1-alpha, thereby reactivating it for aminoacyl-tRNA delivery to the ribosome during translation elongation. Isoform 2 functions in stress response by regulating heat-shock-responsive genes through interactions with heat shock transcription factors and direct DNA-binding at heat shock promoter elements (HSE), with nuclear localization. This recombinant fragment provides a focused tool for investigating these essential cellular processes.