Recombinant EF1B2 protein (His tag)

Catalog Number	535352
Synonyms	EF-1-beta/delta 2
Species	Caenorhabditis elegans
Expression System	E. coli
Accession	Q9U2H9
Gene ID	178419
Molecular Weight	Predictes a molecular mass of 13.44 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 14 kDa band.

Product Information

Sequence Region	2-112
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 2-112 aa (Q9U2H9) 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 Probable elongation factor 1-beta/1-delta 2 (EF-1-beta/delta 2) fragment (residues 2-112), a stable and soluble protein unit derived from Caenorhabditis elegans, designed for structural and biochemical studies of nucleotide exchange mechanisms in translation elongation. The full-length Probable elongation factor 1-beta/1-delta 2, encoded by the eef-1B.2 gene in Caenorhabditis elegans, functions to stimulate the exchange of GDP for GTP bound to elongation factor 1-alpha (EF-1-alpha). This activity is critical for regulating protein synthesis by recycling EF-1-alpha to its active GTP-bound state, facilitating efficient aminoacyl-tRNA delivery during translation elongation. The recombinant fragment (residues 2-112) represents a computationally optimized region that retains stability and solubility, enabling detailed investigations into its mechanistic role without the complexities of the full-length protein.