Recombinant EI2BB protein (His tag)

Catalog Number	540000
Synonyms	S20I15; S20III15; eIF2B GDP-GTP exchange factor subunit beta
Species	Human
Expression System	E. coli
Accession	P49770
Molecular Weight	Predictes a molecular mass of 40.65 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 42 kDa band.

Product Information

Sequence Region	1-351
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 1-351 aa (P49770) 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 Translation Initiation Factor eIF2B Subunit Beta (EIF2B2) Fragment (1-351) is a high-purity, soluble protein fragment designed for structural and biochemical studies. This fragment represents a stable domain of the eIF2B complex, enabling detailed investigation into its role in eukaryotic translation initiation and GDP-GTP exchange mechanisms. The full-length eIF2B2 protein is a critical component of the eukaryotic translation initiation factor 2B (eIF2B) complex, which catalyzes the exchange of GDP for GTP on the gamma subunit of eIF2. This activity is essential for initiating protein synthesis by facilitating the binding of methionyl-initiator methionine tRNA to the ribosome. The guanine nucleotide exchange function of eIF2B is repressed when eIF2 is phosphorylated on its alpha subunit, leading to global translational repression under stress conditions. The protein is localized in the cytoplasm and cytosol, where it participates in regulating cellular protein synthesis. The provided fragment (residues 1-351) encompasses key functional regions, making it ideal for exploring eIF2B's mechanistic contributions to translation control.