Recombinant IF5A2 protein (His tag)

Catalog Number	545890
Synonyms	eIF-5A-2; eIF-5A2; Eukaryotic initiation factor 5A isoform 2
Species	Human
Expression System	E. coli
Accession	Q9GZV4
Molecular Weight	Predictes a molecular mass of 18.31 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 19 kDa band.

Product Information

Sequence Region	2-153
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 2-153 aa (Q9GZV4) 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 Eukaryotic translation initiation factor 5A-2 (eIF-5A-2) Fragment (aa 2-153) - A highly stable and soluble protein fragment ideal for studying translation elongation mechanisms, ribosome stalling rescue, and ribosome quality control pathways. This carefully selected fragment maintains structural integrity while providing researchers with a reliable tool for biochemical and structural analyses. Eukaryotic translation initiation factor 5A-2 (eIF-5A-2), encoded by the EIF5A2 gene, is a crucial translation factor that promotes translation elongation and termination, particularly when ribosomes stall at specific amino acid sequence contexts. The protein plays a vital role in rescuing stalled ribosomes and is specifically required for efficient translation of polyproline-containing peptides and other motifs that cause ribosomal stalling. Additionally, eIF-5A-2 functions as a ribosome quality control cofactor by joining the RQC complex to facilitate peptidyl transfer during CAT tailing. The protein is also implicated in actin dynamics, cell cycle progression, mRNA decay, and stress response pathways. eIF-5A-2 localizes to the cytoplasm, nucleus, and endoplasmic reticulum membrane, where it functions as a peripheral membrane protein on the cytoplasmic side. The hypusine modification of this protein promotes nuclear export and cytoplasmic localization, with dynamic shifts in localization occurring under apoptotic conditions.