Recombinant FSAF1 protein (His tag)

Catalog Number	545471
Species	Human
Expression System	E. coli
Accession	Q8NDD1
Molecular Weight	Predictes a molecular mass of 18.86 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 20 kDa band.

Product Information

Sequence Region	85-235
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 85-235 aa (Q8NDD1) 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 40S small subunit processome assembly factor 1 (FSAF1) fragment (residues 85-235) - a highly soluble and stable protein domain ideal for structural biology and functional studies of ribosome biogenesis mechanisms. The full-length 40S small subunit processome assembly factor 1 (FSAF1) is an essential component of the small subunit (SSU) processome, which serves as the first precursor of the small eukaryotic ribosomal subunit. During SSU processome assembly in the nucleolus, FSAF1 works in concert with numerous ribosome biogenesis factors, RNA chaperones, and ribosomal proteins to facilitate critical processes including RNA folding, modifications, rearrangements, and cleavage. A key regulatory function of FSAF1 involves preventing premature recruitment of helicase DHX37 before the post-A1 state, ensuring proper temporal control of ribosome assembly. The protein localizes to both chromosomes and the nucleolus, reflecting its central role in coordinating ribosomal RNA processing and maturation events fundamental to cellular protein synthesis.