Recombinant RS3A protein (His tag)

Catalog Number	537883
Synonyms	40S ribosomal protein S3a; v-fos transformation effector protein; Fte-1
Species	Human
Expression System	E. coli
Accession	P61247
Molecular Weight	Predictes a molecular mass of 28.35 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 28 kDa band.

Product Information

Sequence Region	2-233
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>85%, 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 2-233 aa (P61247) 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 Small Ribosomal Subunit Protein eS1 (RPS3A) Fragment (2-233) is a high-quality, stable protein fragment designed for structural and biochemical studies. This 232-amino acid fragment retains key functional characteristics of the full-length protein, offering researchers a reliable tool for investigating ribosomal assembly, protein synthesis, and cellular transformation mechanisms. The full-length Small Ribosomal Subunit Protein eS1 (RPS3A) is an essential component of the 40S ribosomal subunit, playing a critical role in protein synthesis as part of the large ribonucleoprotein complex responsible for cellular protein production. As a member of the small subunit (SSU) processome, it contributes to ribosomal biogenesis in the nucleolus, where it associates with nascent pre-rRNA and facilitates RNA folding, modifications, and cleavage processes. The protein demonstrates dynamic subcellular localization, primarily residing in the cytoplasm while also localizing to the nucleus and nucleolus. Notably, it accumulates in cytoplasmic mRNP granules containing untranslated mRNAs and may regulate transcription factor DDIT3 during erythropoiesis. Its alternative designation as v-fos transformation effector protein (Fte-1) underscores its potential significance in cellular transformation pathways.