Recombinant RS23 protein (His tag)

Catalog Number	537893
Synonyms	40S ribosomal protein S23
Species	Human
Expression System	E. coli
Accession	P62266
Molecular Weight	Predictes a molecular mass of 17.33 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 17 kDa band.

Product Information

Sequence Region	2-143
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>87%, 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 2-143 aa (P62266) 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 uS12 (40S Ribosomal Protein S23), corresponding to amino acids 2-143, is a high-purity fragment designed for structural and biochemical studies. This stable and soluble protein unit retains key functional regions, making it ideal for investigating ribosomal assembly, translation accuracy, and ribosome biogenesis processes. The full-length Small Ribosomal Subunit Protein uS12 (RPS23) is an essential component of the ribosome, the cellular machinery responsible for protein synthesis. As part of the small ribosomal subunit, it binds messenger RNAs and facilitates the selection of cognate aminoacyl-tRNA molecules during translation. This protein plays a critical role in maintaining translational accuracy and is involved in the early stages of ribosome biogenesis as a component of the small subunit processome in the nucleolus. Cellular localization studies indicate its presence in the cytoplasm, cytosol, rough endoplasmic reticulum-associated ribosomes, and nucleolus, reflecting its dynamic role in protein synthesis machinery assembly and function.