Recombinant RS19 protein (His tag)

Catalog Number	537720
Synonyms	40S ribosomal protein S19
Species	Human
Expression System	E. coli
Accession	P39019
Molecular Weight	Predictes a molecular mass of 17.58 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 18 kDa band.

Product Information

Sequence Region	2-145
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 2-145 aa (P39019) 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 eS19 (40S Ribosomal Protein S19) Fragment (aa 2-145) is a high-purity, stable protein designed for structural and biochemical studies. This fragment, derived from the RPS19 gene, represents a soluble and functional unit ideal for investigating ribosome assembly and pre-rRNA processing mechanisms. The full-length Small Ribosomal Subunit Protein eS19 (RPS19) is a critical component of the small ribosomal subunit, essential for protein synthesis in the cell. It plays a key role in pre-rRNA processing and the maturation of 40S ribosomal subunits, functioning as part of the small subunit (SSU) processome in the nucleolus. During ribosome biogenesis, it associates with nascent pre-rRNA and various factors to facilitate RNA folding, modifications, and cleavage, as well as targeted degradation by the RNA exosome. The protein localizes to the cytoplasm, nucleus, and nucleolus, underscoring its importance in ribosomal assembly and cellular protein production.