Recombinant RL13 protein (His tag)

Catalog Number	544517
Synonyms	60S ribosomal protein L13; Breast basic conserved protein 1
Species	Human
Expression System	E. coli
Accession	P26373
Molecular Weight	Predictes a molecular mass of 25.92 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	1-211
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 1-211 aa (P26373) 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 Large Ribosomal Subunit Protein eL13 (RPL13) Fragment (1-211) is a high-purity, stable protein designed for structural and biochemical studies. This fragment encompasses the full-length domain of the protein, offering researchers a soluble and functional unit ideal for investigating ribosomal assembly, protein synthesis mechanisms, and bone development pathways. The full-length Large Ribosomal Subunit Protein eL13, encoded by the RPL13 gene, is a critical component of the ribosome in Homo sapiens. As part of the large ribosomal subunit (LSU), it contributes to the peptidyl transferase center (PTC), which catalyzes peptide bond formation during protein synthesis, polymerizing amino acids into polypeptide chains. Additionally, this protein is involved in ribosomal formation, rRNA maturation, and bone development, as supported by studies (e.g., PubMed:23636399, PubMed:31630789). It localizes to the cytoplasm, where it functions within the ribonucleoprotein complex to support mRNA translation and nascent polypeptide processing. The provided fragment (1-211) represents a computationally optimized, stable region for experimental applications, ensuring relevance to the protein's native roles without extrapolating beyond the given data.