Recombinant RPSA2 protein (His tag)

Catalog Number	549134
Synonyms	37 kDa laminin receptor precursor; 37LRP; 37/67 kDa laminin receptor; LRP/LR; 40S ribosomal protein SA; 40S ribosomal protein SA2; 67 kDa laminin receptor; 67LR; Laminin receptor 1; LamR; Laminin-binding protein precursor p40; LBP/p40
Species	Human
Expression System	E. coli
Accession	A0A8I5KQE6
Molecular Weight	Predictes a molecular mass of 26.42 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	2-222
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>89%, 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 2-222 aa (A0A8I5KQE6) 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	This product is a recombinant fragment of the human Small Ribosomal Subunit Protein uS2B (also known as 37/67 kDa Laminin Receptor), spanning residues 2-222. This 221-amino acid fragment has been computationally selected for its stability and solubility, making it an ideal tool for structural studies, biochemical assays, and functional investigations into its dual roles in ribosome biogenesis and cell surface receptor activity. The full-length Small Ribosomal Subunit Protein uS2B, encoded by the RPSA2 gene, is a multifunctional protein essential for the assembly and stability of the 40S ribosomal subunit, as well as the maturation of 18S rRNA. Beyond its ribosomal functions, it serves as a critical cell surface receptor for laminin, facilitating basement membrane adhesion and activating downstream signaling pathways involved in cell fate determination and tissue morphogenesis. Additionally, it acts as a receptor for various pathogenic agents, including prion proteins, viruses, and bacteria. Subcellular localization studies indicate its presence at the plasma membrane (where the C-terminal laminin-binding domain is accessible), in the cytoplasm, and in the nucleus, highlighting its diverse roles in cellular processes.