Recombinant RSSA protein (His tag)

Catalog Number	537461
Synonyms	37 kDa laminin receptor precursor; 37LRP; 37/67 kDa laminin receptor; LRP/LR; 40S ribosomal protein SA; 67 kDa laminin receptor; 67LR; Colon carcinoma laminin-binding protein; Laminin receptor 1; LamR; Laminin-binding protein precursor p40; LBP/p40; Multidrug resistance-associated protein MGr1-Ag; NEM/1CHD4
Species	Human
Expression System	E. coli
Accession	P08865
Molecular Weight	Predictes a molecular mass of 26.29 kDa. In SDS-PAGE under reducing conditions, it migrates as an approximately 26 kDa band.

Product Information

Sequence Region	2-221
Form	Lyophilized powder
Formulation	Lyophilized from sterile PBS, pH 7.4
Purity	>90%, 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 2-221 aa (P08865) 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 uS2 (RPSA) Fragment (aa 2-221) is a high-purity, stable protein fragment designed for structural and biochemical studies. This 220-amino acid fragment retains key functional characteristics of the full-length protein, including roles in ribosomal assembly and cell adhesion, making it an ideal tool for investigating ribosomal biogenesis, laminin-receptor interactions, and viral pathogenesis mechanisms. The full-length Small Ribosomal Subunit Protein uS2, encoded by the RPSA gene, is a multifunctional protein essential for 40S ribosomal subunit assembly and stability, and for processing 20S rRNA precursor to mature 18S rRNA. It also functions as a cell surface receptor for laminin, mediating basement membrane adhesion and activating signaling pathways involved in cell fate determination and tissue morphogenesis. Additionally, it serves as a receptor for various pathogens including adeno-associated viruses, dengue virus, Sindbis virus, Venezuelan equine encephalitis virus, prion proteins, and certain bacteria. The protein localizes to the cell membrane (with its C-terminal laminin-binding domain extracellularly accessible), cytoplasm, and nucleus. This recombinant fragment (aa 2-221) represents a stable, soluble unit optimized for experimental applications while maintaining biological relevance.