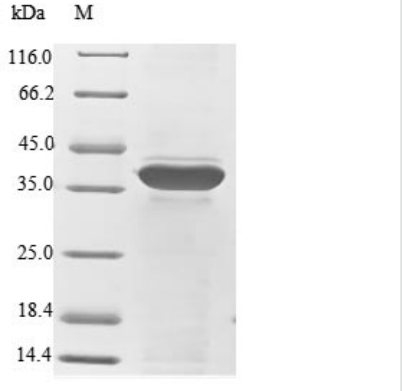
Recombinant Human Small ribosomal subunit protein uS2 (RPSA)

Product Code	CSB-EP020485HUb1
Relevance	Required for the assembly and/or stability of the 40S ribosomal subunit. Required for the processing of the 20S rRNA-precursor to mature 18S rRNA in a late step of the maturation of 40S ribosomal subunits. Also functions as a cell surface receptor for laminin. Plays a role in cell adhesion to the basement membrane and in the consequent activation of signaling transduction pathways. May play a role in cell fate determination and tissue morphogenesis. Acts as a PPP1R16B-dependent substrate of PPP1CA.
Abbreviation	Recombinant Human RPSA protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	P08865
Storage Buffer	Tris-based buffer?50% glycerol
Product Type	Recombinant Proteins
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	SGALDVLQMKEEDVLKFLAAGTHLGGTNLDFQMEQYIYKRKSDGIYIINLKRTW EKLLLAARAIVAIENPADVSVISSRNTGQRAVLKFAAATGATPIAGRFTPGTFTN QIQAAFREPRLLVVTDPRADHQPLTEASYVNLPTIALCNTDSPLRYVDIAIPCNN KGAHSVGLMWWMLAREVLRMRGTISREHPWEVMPDLYFYRDPEEIEKEEQA AAEKAVTKEEFQGEWTAPAPEFTATQPEVADWSEGVQVPSVPIQQFPTEDWS AQPATEDWSAAPTAQATEWVGATTDWS
Research Area	Cardiovascular
Source	E.coli
Target Names	RPSA
Protein Names	37 kDa laminin receptor precursor (37LRP) (37/67 kDa laminin receptor) (LRP/LR) (67 kDa laminin receptor) (67LR) (Colon carcinoma laminin-binding protein) (Laminin receptor 1) (LamR) (Laminin-binding protein precursor p40) (LBP/p40) (Multidrug resistance-
Expression Region	2-295aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged
Mol. Weight	37.7 kDa

Protein Length Full Length of Mature Protein

Image



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The recombinant human RPSA protein is encoded by a recombinant DNA that was cloned into the expression vector and then transformed into the E.coli that supports the expression of the gene. The recombinant DNA was constructed by fusing the N-terminal 10xHis tag and C-terminal Myc tag gene to the gene fragment coding for the 2-295aa of the human RPSA protein. After purification, the product is the recombinant human RPSA protein. This recombinant RPSA protein was subjected to the SDS-PAGE determination. Its purity reaches over 90% evaluated by Bandscan software analysis combined with SAS-PAGE. This RPSA protein ran to the molecular weight of about 35-40 kDa under SDS-PAGE condition. It may have applications in cardiovascular research.

RPSA protein is a ribosomal protein which encoded by RPSA gene in human. RPSA gene consists of seven exons, six of which correspond to the coding sequence. RPSA structure generally is divided in an N-domain (residues 1-209) and a C-domain (residues 210-295). The structure of the N-domain of RPSA is similar to those of prokaryotic RPS2. RPSA is originally discovered by methods of cellular biology. RPSA binds to proteins that are involved in a wide variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis.

Shelf Life

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