RPSA Blocking Peptide

PRODUCT OVERVIEW

Product Name	RPSA, Blocking Peptide
Full Product Name	RPSA Peptide
Product Gene Name	RPSA blocking peptide
Product Synonym Names	SA; LBP; LRP; p40; 67LR; ICAS; lamR; 37LRP; LAMBR; LAMR1; LRP/LR; LBP/p40; NEM/1CHD4; 40S ribosomal protein SA; 37 kDa laminin receptor precursor; ribosomal protein SA
Form/Format	Liquid
Concentration	200 ug/mL (lot specific)
Preparation and Storage	Store RPSA peptide at -20 degree C, stable for one year.
Antibody/Peptide Pairs	RPSA peptide (MBS153869) is used for blocking the activity of RPSA antibody (MBS153619)
Molecular Weight	32,854 Da
OMIM	150370
Species	Human
Buffer	PBS pH 7.2 (10 mM NaH2PO4, 10 mM Na2HPO4, 130 mM NaCl) containing 0.1% bovine serum albumin and 0.02% sodium azide
Location	17 amino acids near the carboxy terminus of human RPSA.
Applications Tested/Suitable for RPSA blocking peptide	Blocking (BL)
Application Notes for RPSA blocking peptide	The peptide is used for blocking the activity of RPSA antibody. It usually blocks the antibody activity completely by incubating the peptide with equal volume of antibody for 30 min at 37 degree C.
Related Product Information for RPSA blocking peptide	MBS153869 is a blocking peptide targeting RPSA. Also known as RPSA Peptide.
Other Notes	Small volumes of RPSA blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for RPSA. It may not necessarily be applicable to this product.

NCBI GI #	9845502
NCBI GeneID	3921
NCBI Accession #	NP_002286
UniProt Primary Accession #	P08865
UniProt Secondary Accession #	P11085; P12030; Q16471; Q6IPD1; Q6IPD2; Q6NSD1; Q6NXQ8; Q86VC0
UniProt Related Accession #	P08865
GenBank Nucleotide #	NM_002295.5
NCBI Official Full Name	40S ribosomal protein SA isoform 1

NCBI Official Synonym Full Names	ribosomal protein SA
NCBI Official Symbol	RPSA
NCBI Official Synonym Symbols	SA; LBP; LRP; p40; 67LR; ICAS; lamR; 37LRP; LAMBR; LAMR1; LRP/LR; LBP/p40; NEM/1CHD4
UniProt Protein Name	40S ribosomal protein SA
UniProt Synonym Protein Names	37 kDa laminin receptor precursor; 37/67 kDa laminin receptor; 67 kDa laminin receptor; Colon carcinoma laminin-binding proteinLaminin receptor 1; Laminin-binding protein precursor p40
Protein Family	30S ribosomal protein
UniProt Gene Name	RPSA
UniProt Entry Name	RSSA_HUMAN
NCBI Protein Information	40S ribosomal protein SA; 37 kDa laminin receptor; 67 kDa laminin receptor; 37/67 kDa laminin receptor; laminin-binding protein precursor p40; colon carcinoma laminin-binding protein; laminin receptor 1 (67kD, ribosomal protein SA); multidrug resistance-associated protein MGr1-Ag
NCBI Summary for RPSA	Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. They have been implicated in a wide variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Many of the effects of laminin are mediated through interactions with cell surface receptors. These receptors include members of the integrin family, as well as non-integrin laminin-binding proteins. This gene encodes a high-affinity, non-integrin family, laminin receptor 1. This receptor has been variously called 67 kD laminin receptor, 37 kD laminin receptor precursor (37LRP) and p40 ribosome-associated protein. The amino acid sequence of laminin receptor 1 is highly conserved through evolution, suggesting a key biological function. It has been observed that the level of the laminin receptor transcript is higher in colon carcinoma tissue and lung cancer cell line than their normal counterparts. Also, there is a correlation between the upregulation of this polypeptide in cancer cells and their invasive and metastatic phenotype. Multiple copies of this gene exist, however, most of them are pseudogenes thought to have arisen from retropositional events. Two alternatively spliced transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Jul 2008]
UniProt Comments for RPSA	RPSA: 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. Also acts as a receptor for several other ligands, including the pathogenic prion protein, viruses, and bacteria. Belongs to the ribosomal protein S2P family. Protein type: Ribosomal Chromosomal Location of Human Ortholog: 3p22.2 Cellular Component: membrane; cytoplasm; plasma membrane; nucleus; cytosol Molecular Function: protein binding; structural constituent of ribosome; laminin receptor activity; laminin binding; ribosome binding Biological Process: SRP-dependent cotranslational protein targeting to membrane; translation; viral reproduction; endonucleolytic cleavage to generate mature 3'-end of SSU-rRNA from (SSU-rRNA, 5.8S rRNA, LSU-rRNA); translational termination; viral infectious cycle; rRNA export from nucleus; cellular protein metabolic process; translational elongation; mRNA catabolic process, nonsense-mediated decay; translational initiation; ribosomal small subunit assembly and maintenance; gene expression; viral transcription; endonucleolytic cleavage in ITS1 to separate SSU-rRNA from 5.8S rRNA and LSU-rRNA from tricistronic rRNA transcript (SSU-rRNA, 5.8S rRNA, LSU-rRNA); cell adhesion Disease: Asplenia, Isolated Congenital
Research Articles on RPSA	**1.** Results indicate that MGr1-Ag/37LRP contributes to laminin-mediated cell adhesion-mediated drug resistance in gastric cancer cells.

Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.
Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/blocking-peptide/rpsa/153869