

RPSA Rabbit pAb

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Catalog # AP52103

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	P08865
Reactivity	Rat, Mouse
Predicted	Human, Dog
Host	Rabbit
Clonality	Polyclonal
Calculated MW	32854
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human LAMR1
Epitope Specificity	201-295/295
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cell membrane. Cytoplasm. Nucleus. Note=67LR is found at the surface of the plasma membrane, with its C-terminal laminin-binding domain accessible to extracellular ligands. 37LRP is found at the cell surface, in the cytoplasm and in the nucleus. Co-localizes with PPP1R16B in the cell membrane.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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]

Additional Information

Gene ID	3921
Other Names	Small ribosomal subunit protein uS2 {ECO:0000255 HAMAP-Rule:MF_03016, ECO:0000303 PubMed:24524803}, 37 kDa laminin receptor precursor {ECO:0000255 HAMAP-Rule:MF_03016}, 37LRP {ECO:0000255 HAMAP-Rule:MF_03016}, 37/67 kDa laminin receptor {ECO:0000255 HAMAP-Rule:MF_03016}, LRP/LR {ECO:0000255 HAMAP-Rule:MF_03016}, 40S ribosomal protein SA, 67 kDa laminin receptor {ECO:0000255 HAMAP-Rule:MF_03016}, 67LR {ECO:0000255 HAMAP-Rule:MF_03016}, Colon carcinoma laminin-binding protein, Laminin receptor 1 {ECO:0000255 HAMAP-Rule:MF_03016}, LamR {ECO:0000255 HAMAP-Rule:MF_03016}, Laminin-binding protein precursor p40 {ECO:0000255 HAMAP-Rule:MF_03016}, LBP/p40 {ECO:0000255 HAMAP-Rule:MF_03016}, Multidrug resistance-associated protein MGr1-Ag, NEM/1CHD4, RPSA {ECO:0000255 HAMAP-Rule:MF_03016}, LAMBR, LAMR1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=1 µg/Test
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	RPSA {ECO:0000255 HAMAP-Rule:MF_03016}
Synonyms	LAMBR, LAMR1
Function	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.
Cellular Location	Cell membrane. Cytoplasm. Nucleus {ECO:0000255 HAMAP-Rule:MF_03016}. Note=67LR is found at the surface of the plasma membrane, with its C-terminal laminin-binding domain accessible to extracellular ligands. 37LRP is found at the cell surface, in the cytoplasm and in the nucleus (By similarity) Colocalizes with PPP1R16B in the cell membrane. {ECO:0000255 HAMAP-Rule:MF_03016}

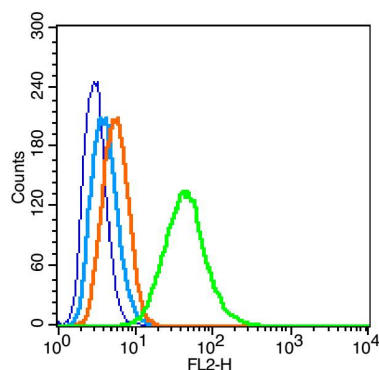
Background

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

References

Yow H.,et al.Proc. Natl. Acad. Sci. U.S.A. 85:6394-6398(1988).
van den Ouweland A.M.W.,et al.Nucleic Acids Res. 17:3829-3843(1989).
Satoh K.,et al.Cancer Lett. 62:199-203(1992).
Jackers P.,et al.Oncogene 13:495-503(1996).

Images

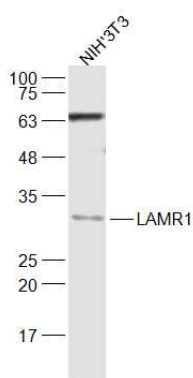


Blank control: RSC96(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice.

Isotype Control Antibody: Rabbit IgG(orange) ;

Secondary Antibody: Goat anti-rabbit IgG-PE(white blue),
Dilution: 1:200 in 1 X PBS containing 0.5% BSA ;

Primary Antibody Dilution: 0.2 µg in 100 µL1X PBS
containing 0.5% BSA(green).



Sample:

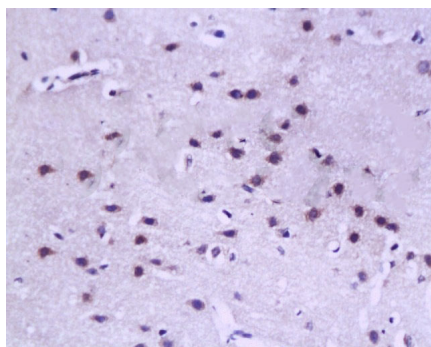
NIH/3T3(Mouse) Cell Lysate at 30 µg

Primary: Anti-LAMR1 (AP52103) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000
dilution

Predicted band size: 32.7/67 kD

Observed band size: 32.7 kD



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed
and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling
bathing for 15min; Block endogenous peroxidase by 3%
Hydrogen peroxide for 30min; Blocking buffer (normal
goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-LAMR1(CT) Polyclonal Antibody,
Unconjugated(AP52103) 1:200, overnight at 4°C, followed
by conjugation to the secondary antibody(SP-0023) and
DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.