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RPSA Antibody
Catalog # ASC11736

Specification

RPSA Antibody - Product Information

Application	**WB**
Primary Accession	P08865
Other Accession	NP_002286, 3921
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 32 kDa** **Observed: 38 kDa KDa**
Application Notes	**RPSA antibody can be used for detection of RPSA by Western blot at 1 - 2 µg/ml. Antibody can also be used for Immunohistochemistry starting at 5 µg/mL. For immunofluorescence start at 20 µg/mL.**

RPSA Antibody - Additional Information

Gene ID **3921**

Target/Specificity
RPSA antibody was raised against a 17 amino acid peptide near the carboxy terminus of human RPSA.

The immunogen is located within amino acids 190 - 240 of RPSA.

Reconstitution & Storage
RPSA antibody can be stored at 4℃ for three months and -20℃, stable for up to one year.

Precautions
RPSA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RPSA Antibody - 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.

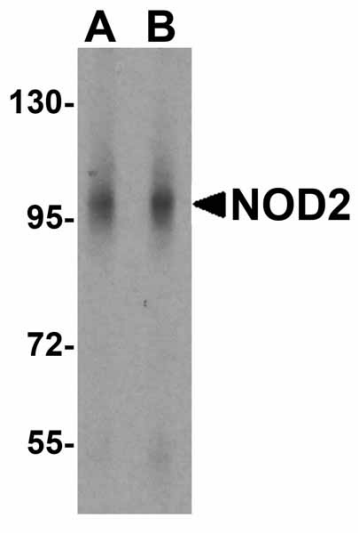
Cellular Location
Cell membrane. Cytoplasm. Nucleus {ECO:0000255|HAMAP-Rule:MF_03016}. Note=67LR is found at the surface of the plasma membrane, with its C-terminal laminin-binding domain accessible to extracellular ligands. 37LRP is found at the cell surface, in the cytoplasm and in the nucleus (By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

RPSA Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

RPSA Antibody - Images



Western blot analysis of NOD2 in human lymph node tissue lysate with NOD2 antibody at (A) 1 and (B) 2 µg/mL.

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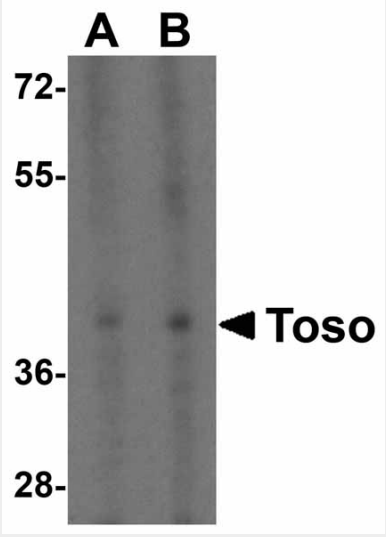

Western blot analysis of TOSO in K562 cell lysate with TOSO antibody at (A) 1 and (B) 2 µg/mL.

RPSA Antibody - Background

The 40S ribosomal protein SA (RPSA) is a high-affinity, non-integrin family, laminin receptor, also known as 67 kDa laminin receptor or 37 kDa laminin receptor precursor (37LRP) (1). Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes and have been implicated in a variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis (2). RPSA is overexpressed in multiple types of cancers and has recently been shown to act as a cancer-specific death receptor (3).

RPSA Antibody - References

Jackers P, Minoletti F, Belotti D, et al. Isolation from a multigene family of the active human gene of the metastasis-associated 67kDa laminin binding protein 37LRP/p40 at chromosome 3p21.3. Oncogene 1996; 13:495-503.
Savino W and Silva-Barbosa SD. Laminin/VLA-6 interactions and T cell function. Braz. J. Med. Biol. Res. 1996; 29:1209-20.
Kumazoe M, Sugihara K, Tsukamoto S, et al. 67-kDa laminin receptor increases cGMP to induce cancer-selective apoptosis. J. Clin. Invest. 2013; 123:787-99.