abcam

ab268079

Anti-67kDa Laminin Receptor antibody [RPSA/2699]

Key facts

Isotype	IgG1
Host species	Mouse
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.05% Sodium azide Constituents: PBS, 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	Recombinant Full Length Protein corresponding to Human RPSA. Database link P08865
Clone number	RPSA/2699
Purification technique	Affinity purification Protein A/G
Light chain type	kappa
Concentration	0.2 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →
Purification notes	Purified from Bioreactor concentrate

Reactivity data

Flow Cyt

Tested

Species	Human
Dilution info	1-2 µg/mL

Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

WB

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Protein Array

Tested

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Expected

Species	Human
Dilution info	Use at an assay dependent concentration.
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	-

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

IHC-P

Tested

Species	Human
Dilution info	1-2 µg/mL
Notes	Perform heat-mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

Not recommended

Species	Recombinant full length protein - Human
Dilution info	-
Notes	-

Target data

See full target information RPSA

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. (Microbial infection) Acts as a receptor for the Adeno-associated viruses 2,3,8 and 9. (Microbial infection) Acts as a receptor for the

Dengue virus. (Microbial infection) Acts as a receptor for the Sindbis virus. (Microbial infection) Acts as a receptor for the Venezuelan equine encephalitis virus. (Microbial infection) Acts as a receptor for the pathogenic prion protein. (Microbial infection) Acts as a receptor for bacteria.

Storage

Shipped at conditions	Blue Ice
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	The 67kDa Laminin Receptor also known as the laminin binding protein or protein laminin functions as a receptor for laminin an important component of the extracellular matrix. This receptor is expressed in many tissue types serving an important mechanical role by mediating the adhesion and migration of cells. The receptor anchors cells to laminin molecules thereby influencing cell differentiation and proliferation. The molecular weight of the laminin receptor is approximately 67 kilodaltons which signifies it as a critical player in various cellular processes.
Biological function summary	This receptor engages in cellular interactions that are essential for maintaining the integrity and architecture of tissues. It often associates with other proteins to form complexes which further strengthen its functional capabilities. By anchoring laminin to the cell surface it regulates cell signaling pathways that influence cell motility invasion and survival. These interactions suggest that the 67kDa Laminin Receptor's function goes beyond simple adhesion impacting cellular responsiveness to external matrix cues.
Pathways	The receptor influences the MAPK and PI3K/Akt signaling pathways which are significant in cell survival and proliferation. Through such pathways it interacts with numerous proteins including integrins and fibronectin receptors facilitating orchestrated cell signaling. This connectivity highlights the receptor's role in cellular communication networks contributing to dynamic processes like wound healing and angiogenesis.

Associated diseases and disorders	Aberrant expression of the 67kDa Laminin Receptor relates to conditions such as cancer and Alzheimer's disease. In cancer its overexpression links to increased tumor invasiveness likely due to enhanced cell motility mediated through integrin interactions. In Alzheimer's disease its relationship with amyloid precursor protein influences plaque formation exacerbating disease progression. Understanding these connections highlights potential therapeutic targets for disease intervention.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

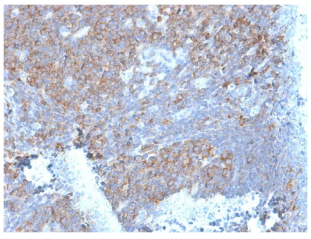
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

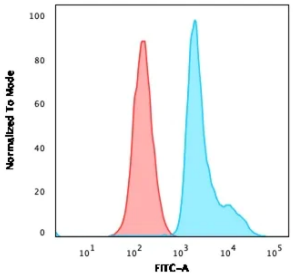
Full details and terms and conditions can be found here:
Terms & Conditions.

9 product images



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-67kDa Laminin Receptor antibody [RPSA/2699] (ab268079)

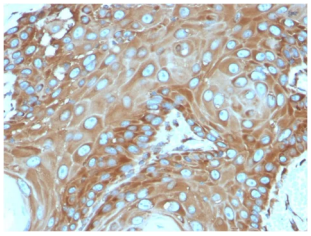
Formalin-fixed, paraffin-embedded human tonsil tissue stained for 67kDa Laminin Receptor using ab268079 at 2 µg/ml in immunohistochemical analysis.



Flow Cytometry - Anti-67kDa Laminin Receptor antibody [RPSA/2699] (ab268079)

67kDa Laminin Receptor Flow Cytometry staining using mouse Anti-67kDa Laminin Receptor antibody

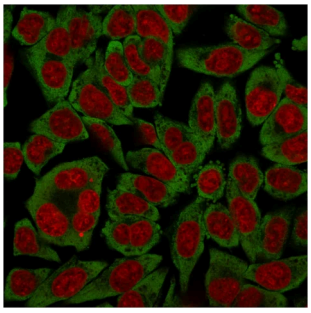
Flow Cytometric analysis of paraformaldehyde-fixed Raji cells labelling 67kDa Laminin Receptor using ab268079 at at 2 µg/ml followed by goat anti-Mouse IgG-CF488 (blue) and Isotype Control (Red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-67kDa Laminin Receptor antibody [RPSA/2699] (ab268079)

67kDa Laminin Receptor Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-67kDa Laminin Receptor antibody

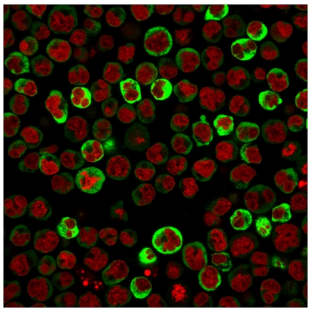
Formalin-fixed, paraffin-embedded human basal cell carcinoma tissue stained for 67kDa Laminin Receptor using ab268079 at 2 µg/ml in immunohistochemical analysis.



Immunocytochemistry/ Immunofluorescence - Anti-67kDa Laminin Receptor antibody [RPSA/2699] (ab268079)

67kDa Laminin Receptor Immunocytochemistry/ Immunofluorescence staining using mouse Anti-67kDa Laminin Receptor antibody

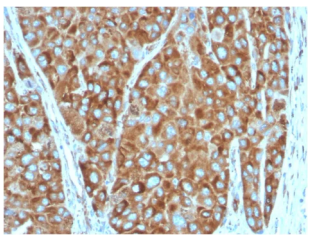
Immunofluorescent staining of HeLa cells stained for 67kDa Laminin Receptor using ab268079 at 2 µg/ml followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are labeled with RedDot (red).



Immunocytochemistry/ Immunofluorescence - Anti-67kDa Laminin Receptor antibody [RPSA/2699] (ab268079)

67kDa Laminin Receptor Immunocytochemistry/ Immunofluorescence staining using mouse Anti-67kDa Laminin Receptor antibody

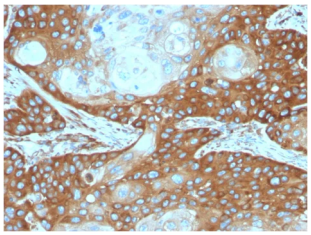
Immunofluorescent staining of paraformaldehyde-Raji cells stained for 67kDa Laminin Receptor using ab268079 at 2 µg/ml followed by goat anti-Mouse IgG conjugated to CF488 (green). Nuclei are labeled with RedDot (red).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-67kDa Laminin Receptor antibody [RPSA/2699] (ab268079)

67kDa Laminin Receptor Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-67kDa Laminin Receptor antibody

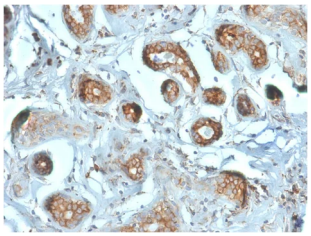
Formalin-fixed, paraffin-embedded human colon carcinoma tissue stained for 67kDa Laminin Receptor using ab268079 at 2 µg/ml in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-67kDa Laminin Receptor antibody [RPSA/2699] (ab268079)

67kDa Laminin Receptor Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-67kDa Laminin Receptor antibody

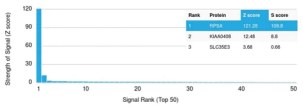
Formalin-fixed, paraffin-embedded human cervix carcinoma tissue stained for 67kDa Laminin Receptor using ab268079 at 2 µg/ml in immunohistochemical analysis.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-67kDa Laminin Receptor antibody [RPSA/2699] (ab268079)

67kDa Laminin Receptor Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using mouse Anti-67kDa Laminin Receptor antibody

Formalin-fixed, paraffin-embedded human breast carcinoma tissue stained for 67kDa Laminin Receptor using ab268079 at 2 µg/ml in immunohistochemical analysis.



Protein Array - Anti-67kDa Laminin Receptor antibody [RPSA/2699] (ab268079)

Protein Array containing more than 19,000 full-length human proteins using ab268079. Z- and S-Score: The Z-score represents the strength of a signal that a monoclonal antibody (MAb) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt^{TM} array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt^{TM} are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a MAb to its intended target. A MAb is considered to specific to its intended target, if the MAb has an S-score of at least 2.5. For example, if a MAb binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that MAb to protein X is equal to 29.

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