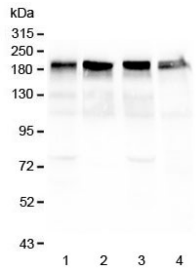
Laminin Gamma Antibody / Laminin Gamma 1-3 Polyclonal Antibody (R32946)

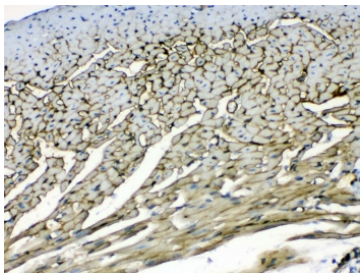
Catalog No.	Formulation	Size
R32946	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

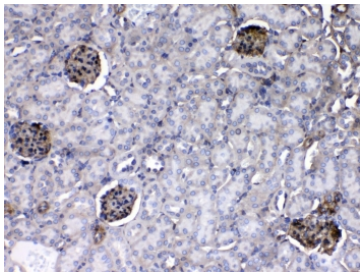
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity
Buffer	Lyophilized from 1X PBS with 2.5% BSA, 0.025% sodium azide
UniProt	P02468, Q61092, Q9R0B6
Localization	Membrane, secreted (cytoplasmic in some tissue)
Applications	Western Blot: 0.5-1ug/ml IHC (FFPE): 1-2ug/ml
Limitations	This Laminin Gamma Antibody / Laminin Gamma 1-3 Polyclonal Antibody is available for research use only.



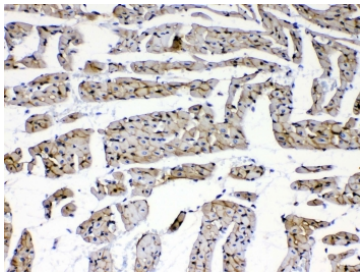
Laminin Gamma Antibody by WB in human, mouse and rat samples. Western blot analysis of mouse lung (lane 1), rat heart (lane 2), rat lung (lane 3), and human HeLa cell (lane 4) lysates using Laminin Gamma Antibody at 0.5 ug/ml. The expected molecular weights are approximately 172-200 kDa for laminin gamma 1 and gamma 3, and 130-140 kDa for laminin gamma 2.



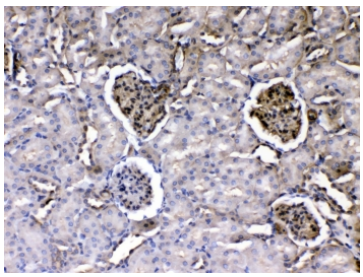
Laminin Gamma Antibody by IHC in mouse heart. Immunohistochemistry of FFPE mouse heart tissue using Laminin Gamma Antibody at 1 ug/ml. Brown immunoreactivity is distributed along the extracellular spaces surrounding cardiac muscle fibers, highlighting the network-like organization of the myocardial extracellular matrix. Hematoxylin counterstains nuclei blue. Heat-induced epitope retrieval was performed by steaming sections in citrate buffer, pH 6, for 20 minutes.



Laminin Gamma Antibody by IHC in mouse kidney. Immunohistochemistry of FFPE mouse kidney tissue using Laminin Gamma Antibody at 1 ug/ml. Brown staining is visible within renal glomeruli and along portions of the surrounding tubular structures, consistent with the distribution of basement membrane-associated laminin proteins. Hematoxylin counterstains nuclei blue. Heat-induced epitope retrieval was performed by steaming sections in citrate buffer, pH 6, for 20 minutes.



Laminin Gamma Antibody by IHC in rat heart. Immunohistochemistry of FFPE rat heart tissue using Laminin Gamma Antibody at 1 ug/ml. Brown immunoreactivity highlights extracellular matrix structures surrounding cardiac muscle fibers, with staining outlining individual myocardial bundles and interstitial spaces. Hematoxylin counterstains nuclei blue. Heat-induced epitope retrieval was performed by steaming sections in citrate buffer, pH 6, for 20 minutes.



Laminin Gamma Antibody by IHC in rat kidney. Immunohistochemistry of FFPE rat kidney tissue using Laminin Gamma Antibody at 1 ug/ml. Brown immunoreactivity is prominent within renal glomeruli, with additional staining along portions of the tubular basement membranes and surrounding extracellular matrix. Hematoxylin counterstains nuclei blue. Heat-induced epitope retrieval was performed by steaming sections in citrate buffer, pH 6, for 20 minutes.

Description

Laminin Gamma Antibody / Laminin Gamma 1-3 Polyclonal Antibody is intended to recognize members of the laminin gamma chain family, comprising laminin gamma 1, gamma 2, and gamma 3. These extracellular matrix glycoproteins are encoded by the LAMC1, LAMC2, and LAMC3 genes, respectively. Laminin gamma chains are essential components of heterotrimeric laminin complexes that contribute to basement membrane structure, cellular adhesion, and tissue organization. Each laminin heterotrimer contains one alpha, one beta, and one gamma chain, with different combinations producing complexes that support specialized biological functions.

Laminin gamma 1 is the most widely distributed gamma chain and participates in numerous laminin isoforms, including laminin-111, laminin-211, laminin-411, and laminin-511. These complexes contribute to basement membrane stability and interactions between epithelial, endothelial, and stromal cells. Gamma 1-containing laminins participate in extracellular matrix assembly through interactions with other basement membrane components, including nidogens, collagen IV networks, and heparan sulfate proteoglycans.

Laminin gamma 2, encoded by LAMC2, is a component of laminin-332, which is particularly important for epithelial adhesion and basement membrane anchoring. Laminin-332 interacts with cell-surface integrins and contributes to the organization of hemidesmosomes and other adhesive structures. Gamma 2 expression and processing have also been

investigated in epithelial wound repair and carcinoma invasion, where changes in extracellular matrix organization can influence cellular migration and tissue remodeling.

Laminin gamma 3, encoded by LAMC3, has a more restricted distribution and participates in laminin complexes associated with selected epithelial and neural tissues. Its biological functions have been investigated in basement membrane organization and nervous system development. Pathogenic variants in LAMC3 have been associated with abnormalities of cerebral cortical development, highlighting the importance of specialized laminin complexes in tissue morphogenesis.

Although the three gamma chains share structural characteristics, their expression patterns, molecular interactions, and biological roles are not identical. Studying the laminin gamma family can help clarify how extracellular matrix composition influences tissue architecture, cell adhesion, and developmental organization. NSJ Bioreagents offers this Laminin Gamma Antibody for research examining basement membrane proteins and the contributions of laminin gamma chains to extracellular matrix function.

Explore our Cell Biology Antibodies for additional research tools targeting extracellular matrix proteins involved in basement membrane assembly, cell adhesion, and tissue organization.

Application Notes

Optimal dilution of the Laminin Gamma Antibody / Laminin Gamma 1-3 Polyclonal Antibody should be determined by the researcher.

Immunogen

Amino acid sequences from Laminin gamma 1-3 (NKLNEIEGSLNKAKDEMKAS + DLEERVRRQRNHLHLLETSI + LQLDSHGALHHKLRQLEEES) were used as the immunogen for the Laminin gamma antibody.

Storage

After reconstitution, the Laminin gamma antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

Alternate Names

Laminin gamma chain antibody, Laminin gamma 1-3 antibody, Pan Laminin Gamma antibody, Laminin gamma subunit antibody, Laminin gamma family antibody

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