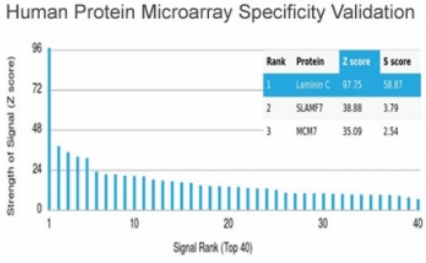
LAMC1 Antibody LAMC1/3162 / Laminin gamma 1 Monoclonal Antibody [clone LAMC1/3162] (V8865)

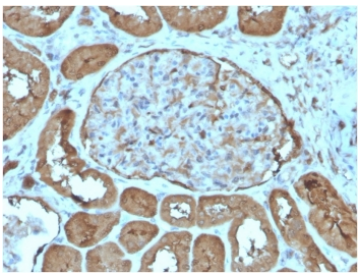
Catalog No.	Formulation	Size
V8865-100UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	100 ug
V8865-20UG	0.2 mg/ml in 1X PBS with 0.1 mg/ml BSA (US sourced), 0.05% sodium azide	20 ug
V8865SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG1, kappa
Clone Name	LAMC1/3162
Purity	Protein A/G affinity
UniProt	P11047
Localization	Basement membrane
Applications	Immunohistochemistry (FFPE): 1-2ug/ml
Limitations	This LAMC1 Antibody LAMC1/3162 / Laminin gamma 1 Monoclonal Antibody is available for research use only.



Analysis of HuProt(TM) microarray containing more than 19,000 full-length human proteins using Laminin gamma 1 antibody (clone LAMC1/3162). These results demonstrate the foremost specificity of the LAMC1/3162 mAb. Z- and S- score: The Z-score represents the strength of a signal that an antibody (in combination with a fluorescently-tagged anti-IgG secondary Ab) 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 the targets on the 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-scores. The S-score therefore represents the relative target specificity of an Ab to its intended target.



Immunohistochemistry analysis of LAMC1 Antibody LAMC1/3162 in human kidney tissue. Formalin-fixed, paraffin-embedded human kidney tissue was stained using Laminin gamma 1 antibody (clone LAMC1/3162). Heat-induced epitope retrieval was performed by boiling tissue sections in 10 mM Tris with 1 mM EDTA, pH 9.0, for 20 minutes, followed by cooling at room temperature prior to antibody incubation. Brown chromogenic signal outlines basement membrane structures of renal tubules and glomeruli, producing a continuous linear staining pattern along tubular epithelial and glomerular capillary basement membranes, while tubular epithelial cytoplasm and interstitial stromal regions show minimal staining. This staining pattern reflects basement membrane-associated expression of Laminin gamma 1 in kidney tissue.

Description

LAMC1 Antibody LAMC1/3162 / Laminin gamma 1 Monoclonal Antibody recognizes Laminin gamma 1, also known as Laminin subunit gamma 1 (LAMC1), a core structural component of multiple laminin heterotrimers that form the backbone of basement membranes. Laminin gamma 1 is a secreted extracellular matrix protein that associates with specific laminin alpha and beta chains to assemble functional laminin isoforms, contributing to basement membrane formation, stability, and organization. LAMC1 Antibody is commonly referenced in the literature as Laminin gamma 1 antibody and is widely used in research settings focused on extracellular matrix biology.

Laminin gamma 1 is broadly expressed in basement membranes underlying epithelial, endothelial, and muscle tissues. In epithelial organs, LAMC1-containing laminins form a continuous basement membrane separating epithelial cells from the underlying stroma, providing both structural support and biochemical cues that regulate cell polarity, adhesion, migration, and differentiation. In vascular and muscular tissues, Laminin gamma 1 contributes to basement membrane integrity and mechanical resilience, supporting tissue architecture and cellular interactions with the extracellular matrix.

Alterations in Laminin gamma 1 expression and basement membrane organization have been documented in a range of pathological contexts. Disruption, remodeling, or abnormal deposition of LAMC1-containing basement membranes has been observed in cancer, fibrosis, and chronic inflammatory conditions, reflecting changes in extracellular matrix composition and tissue invasion dynamics. Consequently, Laminin gamma 1 antibody staining patterns are frequently examined in research studies investigating tumor-stroma interactions, epithelial invasion, angiogenesis, and extracellular matrix remodeling.

At the molecular level, Laminin gamma 1 is essential for the assembly and secretion of several laminin isoforms, making it a central regulator of basement membrane composition across diverse tissues. Its widespread distribution and structural role make LAMC1 Antibody a valuable tool for visualizing basement membranes, assessing extracellular matrix integrity, and studying cell-matrix interactions in normal and diseased tissues. The LAMC1 Antibody LAMC1/3162 is designed to detect Laminin gamma 1 expression in research applications where evaluation of basement membrane structure and extracellular matrix organization is required.

Explore our Cell Biology Antibodies for additional research tools targeting proteins involved in extracellular matrix organization, basement membrane integrity, and cell-matrix interactions.

Application Notes

Optimal dilution of the LAMC1 Antibody LAMC1/3162 / Laminin gamma 1 Monoclonal Antibody should be determined by the researcher.

Immunogen

Murine EHS laminin preparation was used as the immunogen for the Laminin gamma 1 antibody.

Storage

Aliquot the Laminin gamma 1 antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.

Alternate Names

Laminin gamma 1 antibody, LAMC1 antibody, Laminin B2 chain antibody, Laminin subunit gamma 1 antibody, S-Laminin gamma antibody

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