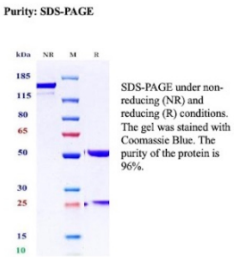
Basement membrane laminin Antibody / Laminin gamma 1 / LAMC1 [clone LAMC1/13970R] (V5936)

Catalog No.	Formulation	Size
V5936-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V5936-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V5936SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Monoclonal (mouse origin)
Isotype	Rabbit IgG, kappa
Clone Name	LAMC1/13970R
Purity	Protein A affinity
UniProt	P11047
Localization	Basement membrane, Extracellular matrix, Extracellular space, Secreted
Applications	Immunohistochemistry (FFPE) : 1-2ug/ml
Limitations	This Basement membrane laminin antibody is available for research use only.



SDS-PAGE Analysis of purified recombinant Basement membrane laminin antibody (clone LAMC1/13970R). Confirmation of Purity and Integrity of Antibody.

Description

Basement membrane laminin Antibody recognizes Laminin gamma 1, also known as Laminin subunit gamma 1 (LAMC1), a core structural component of laminin heterotrimeric complexes that form the backbone of basement membranes. Laminin gamma 1 is a secreted extracellular matrix protein that combines with specific laminin alpha and beta chains to

assemble functional laminin isoforms, which are essential for basement membrane formation, stability, and organization. Basement membrane laminin Antibody is widely referenced in research and pathology contexts focused on extracellular matrix structure and tissue architecture.

Laminin gamma 1 is broadly distributed in basement membranes underlying epithelial, endothelial, and muscle tissues. In epithelial organs, LAMC1-containing laminins form continuous basement membrane layers that separate epithelial cells from underlying stroma and regulate cell polarity, adhesion, migration, and differentiation through interactions with cell surface receptors such as integrins and dystroglycan. In vascular and renal tissues, Laminin gamma 1 is a prominent component of capillary, glomerular, and tubular basement membranes, contributing to structural integrity and selective permeability.

Alterations in Laminin gamma 1 expression and basement membrane organization have been reported in a range of pathological settings. Remodeling, disruption, or abnormal deposition of LAMC1-containing basement membranes has been observed in carcinomas, renal disease, fibrosis, and chronic inflammatory conditions, reflecting changes in extracellular matrix composition and tumor-stroma interactions. Consequently, Laminin gamma 1 antibody staining patterns are frequently examined in studies investigating basement membrane integrity, epithelial invasion, angiogenesis, and extracellular matrix remodeling in normal and diseased tissues.

At the molecular level, Laminin gamma 1 is essential for the assembly and secretion of multiple laminin isoforms, making it a central regulator of basement membrane composition across diverse tissue types. Its widespread localization and structural role make Basement membrane laminin Antibody a valuable tool for visualizing basement membranes, assessing extracellular matrix organization, and studying cell-matrix interactions. The Basement membrane laminin Antibody (clone LAMC1/13970R) is designed to detect Laminin gamma 1 expression in research applications where evaluation of basement membrane structure and extracellular matrix integrity is required.

Application Notes

1. Optimal dilution of the Basement membrane laminin antibody should be determined by the researcher.

2. This Basement membrane laminin antibody is recombinantly produced by expression in CHO cells.

Immunogen

Recombinant human full-length LAMC1 protein was used as the immunogen for the Basement membrane laminin antibody.

Storage

Basement membrane laminin antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.