

# Laminin, gamma 1 (LAMC1) Antibody - With BSA and Azide

Rat Monoclonal Antibody [Clone A5 ] Catalog # AH11743

## **Product Information**

Application	IHC, IF, FC
Primary Accession	<u>P11047</u>
Other Accession	<u>3915, 609663, Q5VYE7, Q6NVY8</u>
Reactivity	Human, Mouse
Host	Rat
Clonality	Monoclonal
Isotype	Rat / IgG2a, kappa
Clone Names	A5
Calculated MW	177603

#### **Additional Information**

Gene ID	3915
Other Names	Laminin subunit gamma-1, Laminin B2 chain, Laminin-1 subunit gamma, Laminin-10 subunit gamma, Laminin-11 subunit gamma, Laminin-2 subunit gamma, Laminin-3 subunit gamma, Laminin-4 subunit gamma, Laminin-6 subunit gamma, Laminin-7 subunit gamma, Laminin-8 subunit gamma, Laminin-9 subunit gamma, S-laminin subunit gamma, S-LAM gamma, LAMC1, LAMB2
Application Note	IHC~~1:100~500 IF~~1:50~200 FC~~1:10~50
Storage	Store at 2 to 8°C.Antibody is stable for 24 months.
Precautions	Laminin, gamma 1 (LAMC1) Antibody - With BSA and Azide is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Protein Information**

Name	LAMC1 {ECO:0000303 PubMed:28397838, ECO:0000312 HGNC:HGNC:6492}
Function	Binding to cells via a high affinity receptor, laminin is thought to mediate the attachment, migration and organization of cells into tissues during embryonic development by interacting with other extracellular matrix components.
Cellular Location	Secreted, extracellular space, extracellular matrix, basement membrane
Tissue Location	Found in the basement membranes (major component).

# Background

Laminins are large hetero-trimeric, non-collagenous glycoproteins composed of  $\alpha$ ,  $\beta$ , and  $\gamma$  chains. This MAb reacts with laminin B2/1 chain of ~210kDa and does not cross-react with other basement membrane components or fibronectin. Its specificity was established by immunoprecipitation and immunofluorescence of human skeletal muscle and kidney with laminin chain-specific MAbs. Epithelial sheets in vivo are separated from the mesenchymal elements of the stroma by a thin layer of a specialized type of extracellular matrix termed the basement membrane (BM). This structure consists of individual components, some of which are ubiquitous in BMs and some are not. The ubiquitous ones comprise laminin (LN), entactin/nidogen (EN), collagen type IV (CIV), and large heparan sulfate proteoglycan (HSPG), which interact specifically with each other to form a continuous and regular BM. Alterations of BM integrity, from local discontinuities up to complete loss, are described in many types of human and animal epithelial neoplasms. This MAb stains uniformly all human and murine basement membranes.

### References

Ljubimov AV et. al., Int J Cancer, 1992; 50:562-566. | Ljubimov AV et. al. Lab Investigation, 1995; 72:461-473. | Folkvord et. al., J Histochem Cytochem, 1989; 37:105-113

#### Images



Formalin-fixed, paraffin-embedded human Renal Cell Carcinoma stained with Laminin Monoclonal Antibody (A5).

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