

Rabbit Anti-Laminin alpha 4 antibody

SL11055R

Product Name:	Laminin alpha 4
Chinese Name:	层粘蛋白α4抗体
Alias:	LAMA3; LAMA4 1; LAMA4; LAMA4_HUMAN; Laminin alpha 4; Laminin alpha 4 chain; Laminin subunit alpha 4 precursor; Laminin subunit alpha-4; Laminin-14 subunit alpha; Laminin-8 subunit alpha; Laminin-9 subunit alpha; Lamininα4; Laminin α4; Laminin-α4; Laminin α 4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Horse, Rabbit, Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100- 500 (Paraffin sections need antigen repair)
	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	200kDa
Cellular localization:	The cell membraneExtracellular matrixSecretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Laminin alpha 4:901-1000/1823
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	Laminins are essential and abundant structural non-collagenous glyco- proteins localizing to basement membranes. Basement membranes (cell-associated extracellular matrices (ECMs)) are polymers of laminins with stabilizing Type IV collagen networks, Nidogen, and several proteoglycans. Basement membranes are found under epithelial

layers, around the endothelium of blood vessels, and surrounding muscle, peripheral nerve, and fat cells. Formation of basement membranes influences cell proliferation, phenotype, migration, gene expression, and tissue architecture. Each laminin is a heterotrimer of a, b, and g chain subunits that undergoes cell-secretion and incorporation into the ECM. Laminins can self-assemble, bind to other matrix macromolecules, and have unique and shared cell interactions mediated by integrins, dystroglycan, and cognate laminin receptors. The human Laminin a-4 gene maps to chromosome 6q21 and is expressed in adult heart, lung, ovary, small and large intestines, liver, and placenta.

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.

Subunit:

Laminin is a complex glycoprotein, consisting of three different polypeptide chains (alpha, beta, gamma), which are bound to each other by disulfide bonds into a cross-shaped molecule comprising one long and three short arms with globules at each end. Alpha-4 is a subunit of laminin-8 (laminin-411), laminin-9 (laminin-421) and laminin-14 (laminin-423).

Subcellular Location:

Secreted > extracellular space > extracellular matrix > basement membrane. Major component.

Tissue Specificity:

In adult, strong expression in heart, lung, ovary small and large intestines, placenta, liver; weak or no expression in skeletal muscle, kidney, pancreas, testis, prostate, brain. High expression in fetal lung and kidney. Expression in fetal and newborn tissues is observed in certain mesenchymal cells in tissues such as smooth muscle and dermis.

Similarity: Contains 4 laminin EGF-like domains. Contains 5 laminin G-like domains.

SWISS: 016363

Gene ID: 3910

Database links:

Entrez Gene: 3910Human

	Entrez Gene: 16775 Mouse
	SwissProt: Q16363Human
	SwissProt: P97927Mouse
	Important Note:
	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
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	Tissue/cell: HeLa cell; 4% Paraformaldehyde-fixed; Triton X-100 at room
	temperature for 20 min; Block endogenous peroxidase by 3% hydrogen peroxide for
	20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody
	incubation with (Laminin alpha 4) Polyclonal Antibody, Unconjugated (SL11055R)
	at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-
	0023) instructions nd DAB staining.
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