



Laminin α -4 Polyclonal Antibody

Catalog No	YP-Ab-17040
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	LAMA4
Protein Name	Laminin subunit alpha-4
Immunogen	The antiserum was produced against synthesized peptide derived from human LAMA4. AA range:481-530
Specificity	Laminin α -4 Polyclonal Antibody detects endogenous levels of Laminin α -4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	$\geq 90\%$
Storage Stability	-20°C/1 year
Synonyms	LAMA4; Laminin subunit alpha-4; Laminin-14 subunit alpha; Laminin-8 subunit alpha; Laminin-9 subunit alpha
Observed Band	203kD
Cell Pathway	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.
Function	caution:Gene LAMA4 was formerly called LAMA3.,domain:Domain G is globular.,domain:The alpha-helical domains I and II are thought to interact with other laminin chains to form a coiled coil structure.,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.,similarity:Contains 4 laminin EGF-like domains.,similarity:Contains 5 laminin G-like domains.,subcellular location:Major component.,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.,tissue specificity:In adult, strong expression in heart, lung, ovary

Background

Laminins, a family of extracellular matrix glycoproteins, are the major noncollagenous constituent of basement membranes. They have been implicated in a wide variety of biological processes including cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Laminins are composed of 3 non identical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively) and they form a cruciform structure consisting of 3 short arms, each formed by a different chain, and a long arm composed of all 3 chains. Each laminin chain is a multidomain protein encoded by a distinct gene. Several isoforms of each chain have been described. Different alpha, beta and gamma chain isomers combine to give rise to different heterotrimeric laminin isoforms which are designated by Arabic numerals in the order of their discovery, i.e. alpha1beta1gamma1 heterotrimer is laminin 1. The bio

matters needing attention

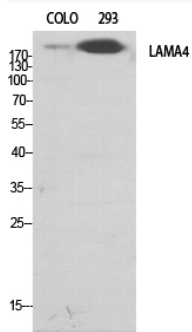
Avoid repeated freezing and thawing!

Usage suggestions

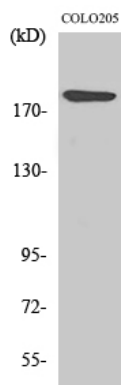
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



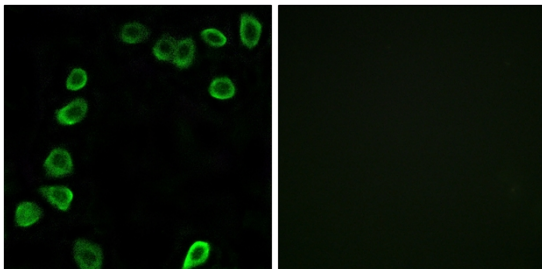
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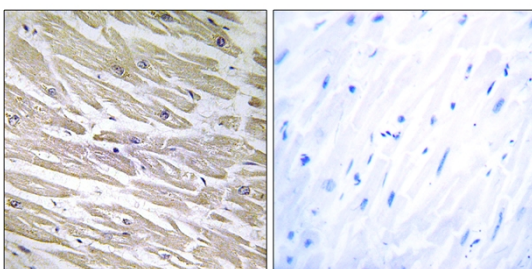
Western Blot analysis of various cells using Laminin α -4 Polyclonal Antibody diluted at 1:500



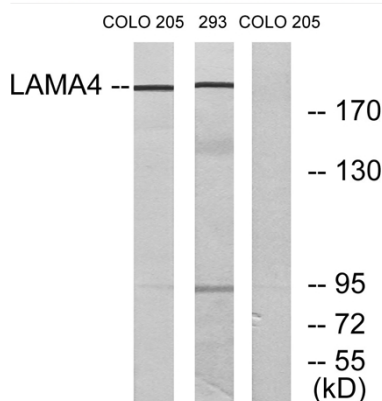
Western Blot analysis of 293 cells using Laminin α -4 Polyclonal Antibody diluted at 1:500



Immunofluorescence analysis of NIH/3T3 cells, using LAMA4 Antibody. The picture on the right is blocked with the synthesized peptide.



Immunohistochemistry analysis of paraffin-embedded human heart tissue, using LAMA4 Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from COLO and 293 cells, using LAMA4 Antibody. The lane on the right is blocked with the synthesized peptide.