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Laminin alpha 4 Rabbit pAb

Catalog # AP100200

Product Information

Primary Accession	Q16363
Other Accession	Q16363
Reactivity	Human
Predicted	Rat, Mouse, Rabbit, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	202568
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Laminin alpha 4
Epitope Specificity	901-1000/1823
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Contains 4 laminin EGF-like domains.Contains 5 laminin G-like domains.
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).
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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.

Additional Information

Gene ID	3910
Other Names	CMD1JJ; LAMA3; LAMA4*-1; LAMA4_HUMAN; LAMA4; Laminin-14 subunit alpha; Laminin-8 subunit alpha; Laminin-9 subunit alpha; LAMA4_MOUSE; laminin subunit alpha 4; laminin, alpha 4

Dilution	ICC/IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. 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.

Protein Information

Name	LAMA4
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. Secreted. Note=Major basement membrane component
Tissue Location	Detected in placenta (at protein level) (PubMed:32337544). Detected in fibroblasts and urine (at protein level) (PubMed:25326458, PubMed:36213313, PubMed:37453717). 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

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