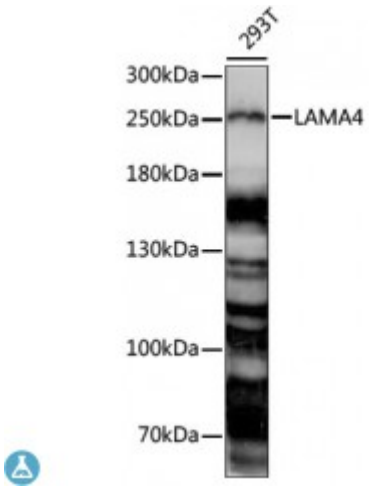
Anti-LAMA4 Antibody



Description	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 biological functions of the different chains and trimer molecules are largely unknown, but some of the chains have been shown to differ with respect to their tissue distribution, presumably reflecting diverse functions in vivo. This gene encodes the alpha chain isoform laminin, alpha 4. The domain structure of alpha 4 is similar to that of alpha 3, both of which resemble truncated versions of alpha 1 and alpha 2, in that approximately 1,200 residues at the N-terminus (domains IV, V and VI) have been lost. Laminin, alpha 4 contains the C-terminal G domain which distinguishes all alpha chains from the beta and gamma chains. The RNA analysis from adult and fetal tissues revealed developmental regulation of expression, however, the exact function of laminin, alpha 4 is not known. Tissue-specific utilization of alternative polyA-signal has been described in literature. Alternative splicing results in multiple transcript variants encoding distinct isoforms.
Model	STJ117481

Host	Rabbit
Reactivity	Human
Applications	WB
Immunogen	A synthetic peptide corresponding to a sequence within amino acids 1-100 of human LAMA4 (NP_001098678.1).
Gene ID	3910
Gene Symbol	LAMA4
Dilution range	WB 1:200 - 1:2000
Tissue Specificity	In adult, strong expression in heart, lung, ovary small and large intestines, placenta, liver
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Laminin subunit alpha-4 Laminin-14 subunit alpha Laminin-8 subunit alpha Laminin-9 subunit alpha
Molecular Weight	202.524 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:6484OMIM:600133Reactome:R-HSA-3000157
Alternative Names	Laminin subunit alpha-4 Laminin-14 subunit alpha Laminin-8 subunit alpha Laminin-9 subunit alpha
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 Localization	Secreted, extracellular space, extracellular matrix, basement membrane,