

## Product datasheet for **CF805721**

### Laminin alpha 4 (LAMA4) Mouse Monoclonal Antibody [Clone ID: OTI5G8]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI5G8
Applications:	IHC, WB
Recommended Dilution:	WB 1:2000, IHC 1:150
Reactivity:	Human, Mouse, Rat
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Human recombinant protein fragment corresponding to amino acids 25-270 of human LAMA4(NP_001098676) produced in E.coli.
Formulation:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
Purification:	Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography (protein A/G)
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Predicted Protein Size:	199.8 kDa
Gene Name:	laminin subunit alpha 4
Database Link:	<a href="#">NP_001098676</a> <a href="#">Entrez Gene 16775 Mouse</a> <a href="#">Entrez Gene 3910 Human</a> <a href="#">Q16363</a>



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**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 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. [provided by RefSeq, Aug 2011]

**Synonyms:**

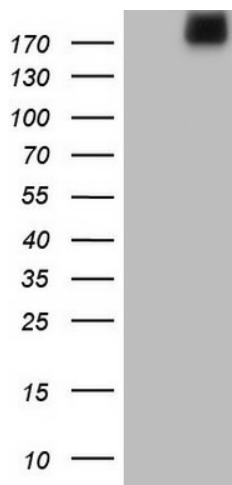
CMD1JJ; LAMA3; LAMA4 -1; LAMA4\*-1

**Protein Families:**

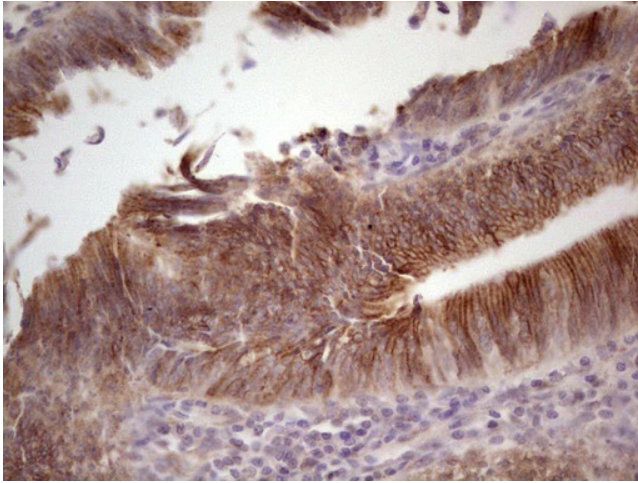
Druggable Genome, Secreted Protein

**Protein Pathways:**

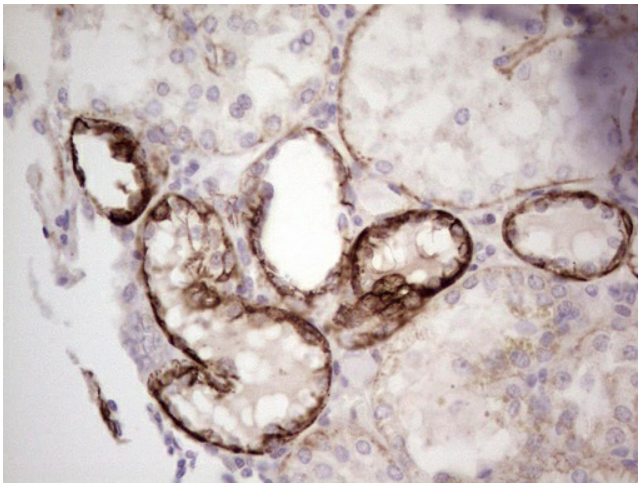
ECM-receptor interaction, Focal adhesion, Pathways in cancer, Small cell lung cancer

**Product images:**

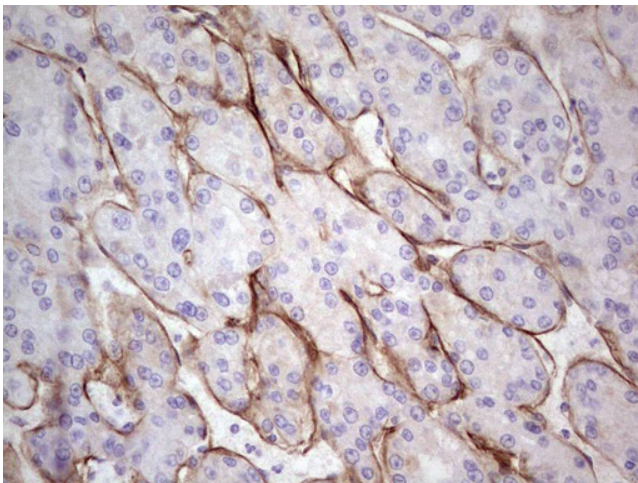
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY LAMA4 (Cat# [RC226434], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-LAMA4 (Cat# [TA805721]). Positive lysates [LY426227] (100ug) and [LC426227] (20ug) can be purchased separately from OriGene.



Immunohistochemical staining of paraffin-embedded Adenocarcinoma of Human colon tissue using anti-LAMA4 mouse monoclonal antibody. ([TA805721]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

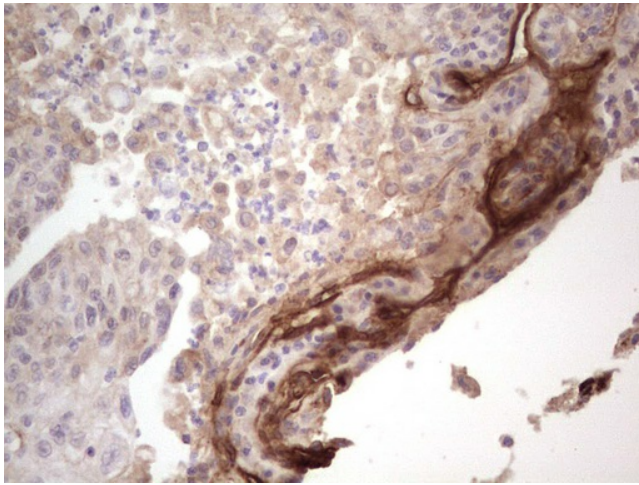


Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-LAMA4 mouse monoclonal antibody. ([TA805721]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

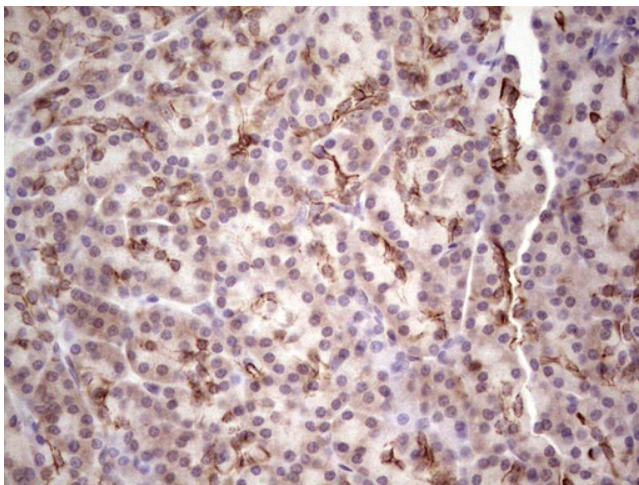


Immunohistochemical staining of paraffin-embedded Carcinoma of Human liver tissue using anti-LAMA4 mouse monoclonal antibody. ([TA805721]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.

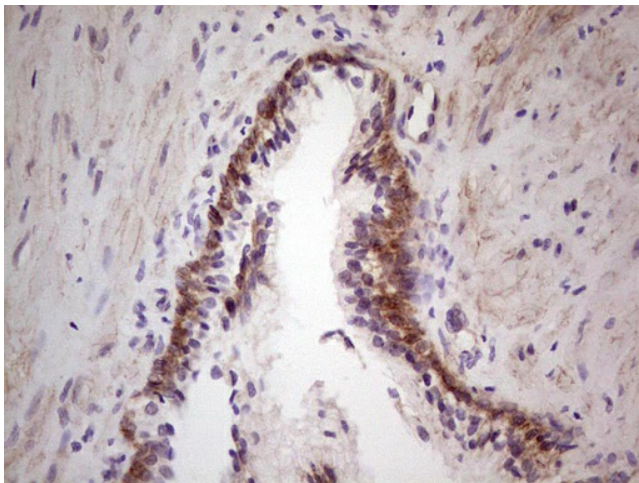




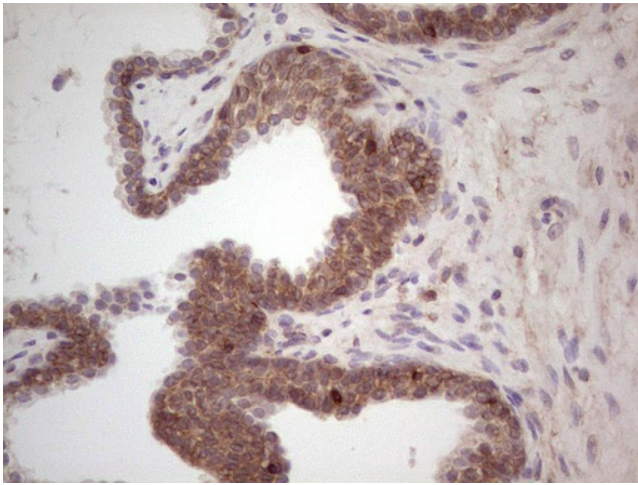
Immunohistochemical staining of paraffin-embedded Carcinoma of Human lung tissue using anti-LAMA4 mouse monoclonal antibody. ([TA805721]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



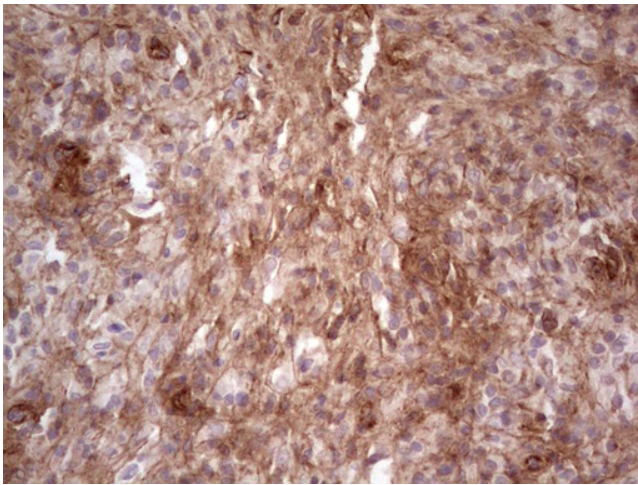
Immunohistochemical staining of paraffin-embedded Human pancreas tissue within the normal limits using anti-LAMA4 mouse monoclonal antibody. ([TA805721]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human prostate tissue within the normal limits using anti-LAMA4 mouse monoclonal antibody. ([TA805721]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Carcinoma of Human prostate tissue using anti-LAMA4 mouse monoclonal antibody. ([TA805721]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human lymph node tissue within the normal limits using anti-LAMA4 mouse monoclonal antibody. ([TA805721]; heat-induced epitope retrieval by 1mM EDTA in 10mM Tris, pH8.5, 120°C for 3min). Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.