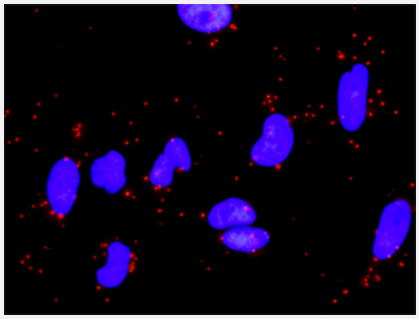
LAMA5 & LAMC1 Protein Protein Interaction Antibody Pair

Catalog # DI0341 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between LAMA5 and LAMC1. HeLa cells were stained with anti-LAMA5 rabbit purified polyclonal antibody 1:1200 and anti-LAMC1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Specification

Product Description	This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the LAMA5 protein, and the other against the LAMC1 protein for use in *in situ* Proximity Ligation Assay. See Publication Reference below.
Reactivity	Human
Quality Control Testing	Protein protein interaction immunofluorescence result. Representative image of Proximity Ligation Assay of protein-protein interactions between LAMA5 and LAMC1. HeLa cells were stained with anti-LAMA5 rabbit purified polyclonal antibody 1:1200 and anti-LAMC1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.
Supplied Product	Antibody pair set content: 1. LAMA5 rabbit purified polyclonal antibody (100 ug) 2. LAMC1 mouse monoclonal antibody (40 ug) *Reagents are sufficient for at least 30-50 assays using recommended protocols.
Storage Instruction	Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze thaw cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

- *In situ* Proximity Ligation Assay (Cell)

Gene Info — LAMA5

Entrez GeneID	3911
Gene Name	LAMA5
Gene Alias	KIAA1907
Gene Description	laminin, alpha 5
Omim ID	601033
Gene Ontology	Hyperlink
Gene Summary	Components of the extracellular matrix exert myriad effects on tissues throughout the body. In parti cular, the laminins, a family of heterotrimeric extracellular glycoproteins, affect tissue development and integrity in such diverse organs as the kidney, lung, skin, and nervous system. It is thought that laminins mediate the attachment, migration, and organization of cells into tissues during embryoni c development by interacting with other extracellular matrix components. Laminins function as het erotrimeric complexes of alpha, beta, and gamma chains, with each chain type representing a diff erent subfamily of proteins. The protein encoded by this gene belongs to the alpha subfamily of la minin chains and is a major component of basement membranes. Two transcript variants encodin g different isoforms have been found for this gene, but the full-length nature of one of them has not been determined. [provided by RefSeq
Other Designations	laminin alpha 5|laminin alpha-5 chain

Gene Info — LAMC1

Entrez GeneID	3915
Gene Name	LAMC1
Gene Alias	LAMB2, MGC87297
Gene Description	laminin, gamma 1 (formerly LAMB2)
Omim ID	150290 176780
Gene Ontology	Hyperlink

Gene Summary	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 inc luding cell adhesion, differentiation, migration, signaling, neurite outgrowth and metastasis. Lamin ins 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 prot ein encoded by a distinct gene. Several isoforms of each chain have been described. Different al pha, beta and gamma chain isomers combine to give rise to different heterotrimeric laminin isofor ms which are designated by Arabic numerals in the order of their discovery, i.e. alpha1beta1gam ma1 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 gamma chain i soform laminin, gamma 1. The gamma 1 chain, formerly thought to be a beta chain, contains struc tural domains similar to beta chains, however, lacks the short alpha region separating domains I a nd II. The structural organization of this gene also suggested that it had diverged considerably fro m the beta chain genes. Embryos of transgenic mice in which both alleles of the gamma 1 chain g ene were inactivated by homologous recombination, lacked basement membranes, indicating tha t laminin, gamma 1 chain is necessary for laminin heterotrimer assembly. It has been inferred by a nalogy with the strikingly similar 3' UTR sequence in mouse laminin gamma 1 cDNA, that multiple polyadenylation sites are utilized in human to generate the 2 different sized mRNAs (5.5 and 7.5 k b) seen on Northern analysis. [provided by RefSeq
Other Designations	OTTHUMP00000033450|formerly LAMB2|laminin, gamma 1

Pathway

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

Disease

- Cardiovascular Diseases

- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease
- Macular Degeneration
- Ovarian Neoplasms