Human Laminin subunit gamma-1(LAMC1) ELISA kit

Product Code	CSB-EL012735HU
Abbreviation	LAMC1
Protein Biological Process 1	Cell Adhesion
Target Name	laminin, gamma 1 (formerly LAMB2)
Uniprot No.	P11047
Alias	RP11-181K3.1, LAMB2, MGC87297, laminin, gamma 1
Product Type	ELISA Kit
Immunogen Species	Homo sapiens (Human)
Protein Biological Process 3	Cell adhesion
Sample Types	serum, plasma, tissue homogenates
Detection Range	0.78 ng/mL-50 ng/mL
Sensitivity	0.195 ng/mL
Assay Time	1-5h
Sample Volume	50-100ul
Detection Wavelength	450 nm
Lead Time	3-5 working days after you place the order, and it takes another 3-5 days for delivery via DHL or FedEx.
Research Area	Signal Transduction
Gene Names	LAMC1
Tag Info	quantitative
Protein Description	Sandwich
Description	This Human LAMC1 ELISA Kit was designed for the quantitative measurement of Human LAMC1 protein in serum, plasma, tissue homogenates. It is a Sandwich ELISA kit, its detection range is 0.78 ng/mL-50 ng/mL and the sensitivity is 0.195 ng/mL.
Target Details	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 gamma chain isoform laminin, gamma 1. The gamma 1 chain, formerly thought to be a beta chain, contains structural domains similar to beta chains, however, lacks the short alpha region separating domains I and II. The structural organization of this gene also suggested that it had diverged considerably from the beta chain genes. Embryos of transgenic mice in which both alleles of the gamma 1 chain gene were inactivated by homologous recombination, lacked basement membranes, indicating that laminin, gamma 1 chain is necessary for laminin heterotrimer assembly. It has been inferred by analogy 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 kb) seen on Northern analysis.

Product Precision

Intra-assay Precision (Precision within an assay): CV%<8%

Three samples of known concentration were tested twenty times on one plate to assess.

Inter-assay Precision (Precision between assays): CV%<10%

Three samples of known concentration were tested in twenty assays to assess.

Linearity

To assess the linearity of the assay, samples were spiked with high concentrations of human LAMC1 in various matrices and diluted with the Sample Diluent to produce samples with values within the dynamic range of the assay.

?	Sample	Serum(n=4)
1:1	Average %	102
	Range %	98-110
1:2	Average %	93
	Range %	89-97
1:4	Average %	88
	Range %	84-92
1:8	Average %	98
	Range %	94-102

Recovery

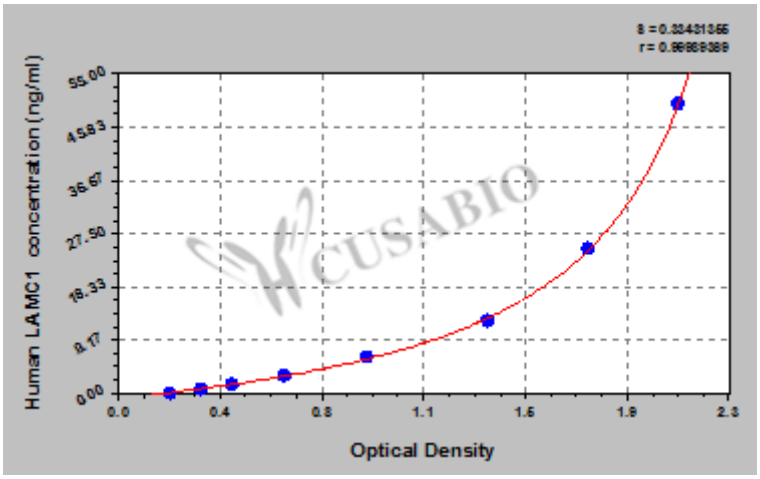
The recovery of human LAMC1 spiked to levels throughout the range of the assay in various matrices was evaluated. Samples were diluted prior to assay as directed in the Sample Preparation section.

Sample Type	Average % Recovery	Range
Serum (n=5)	91	85-95

EDTA plasma (n=4)	95	90-100

Typical

These standard curves are provided for demonstration only. A standard curve should be generated for each set of samples assayed.



ng/ml	OD1	OD2	Average	Corrected
50	2.012	2.148	2.080	1.888
25	1.701	1.793	1.747	1.555
12.5	1.412	1.332	1.372	1.180
6.25	0.901	0.945	0.923	0.731
3.12	0.633	0.601	0.617	0.425
1.56	0.412	0.438	0.425	0.233
0.78	0.305	0.314	0.310	0.118
0	0.194	0.189	0.192	?

Msds

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