

Product datasheet for PH316928

Laminin gamma 1 (LAMC1) (NM_002293) Human Mass Spec Standard

Product data:

Product Type:	Mass Spec Standards
Description:	LAMC1 MS Standard C13 and N15-labeled recombinant protein (NP_002284)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC216928
Predicted MW:	177.57 kDa
Protein Sequence:	>RC216928 representing NM_002293 Red=Cloning site Green=Tags(s)

MRGSHRAAPALRPRGRLWPVLAVLAAAAAAGCAQAAMDECTDEGGRPQRCMPEFVNAAFNVTVVATNTCG
TPPEEYCVQTVGTGVTKSCHLCDAGQPHLQHGAFLTDYNNQADTTWWQSQTMLAGVQYPPSSINLTLHLG
KAFDITYVRLKFHTSRPESFAIYKRTREDGPWIPYQYYSGSCENTYSKANRGFIRTGGDEQALCTDEFS
DISPLTGGNVAFTLEGRPSAYNFDNSPVLQEWVTATDIRVTLNRLNTFGDEVFNDPKVLKSYYYAISDF
AVGGRCKCNHASECMKNEFDKLCVNCCKHNTYGVDCCKLPFFNDRPWRRATAESASECLPCDCNGRSQE
CYFDPYELYRSTGHGGHCTNCQDNTDGAHCERCENFFRLGNNEACSSCHCSPVGLSTQCDYGRCSCKP
GVMGDKCQDRCQPGFHSLEAGCRPCSCDPSSGIDEENVETGRCVCKDNVEGFNCERCKPGFFNLESSNPR
GCTPCFCFGHSSVCTNAVGYSVYSISSTFQIDEDGWRAEQRDGSEASLEWSSERQDIAVSDSYFPRYFI
APAKFLGKQVLSYGQNLFSFRVDRRDRTRLSAEDLVLEGAGLRVSVPLIAQGNYSYSETTVKYVFRLEHA
TDYPWRPALTPFEFQKLLNNTLSIKIRGTYSERSAGYLDVTLASARPGVGPATWVESCTCPVGGYGGQF
CEMCLSGYRRETPNLGPYSPCVLCAENHSETCDPETGVCNCRDNTAGPHCEKCSGYYGDSTAGTSSDC
QPCPCPGSSCAVVPKTEVVCTNCPTGTTGKRCELDDGYFGDPLGRNGPVRLCRLCQCSDNIDPNAV
NCNRLTGECLKCIYNTAGFYCDRCKDGFNGNPLAPNPADKCKACNCNPYGTMKQQSSCNPVTGQCECLPH
VTGQDCGACDPGFYNLQSGQGCERCDCALGSTNGQCDIRTGQCECQPGITGQHCERCEVNHFGFPEGC
KPCDCHPEGSLSLQCKDDGRCECREGFVGNRCDQCEENYFYNRSWPGCQCEPCACYRLVKDKVADHRVKLQ
ELESILIANLGTGDEMVTDAQAFEDRLKKAEREVMDLLREAQDVKDQNLMDRLQRVNNTLSSQISRLQNI
RNTIEETGNLAEQARAHVENTERLIEIASRELEKAKVAAANVSVTQPESTGDPNNMTLLAEAEARKLAERH
KQEADDIVRVAKTANDTSTEAYNLLLRLTAGENQTAFEIEELNRKYEQAKNISQDLEKQAARVHEEAKRA
GDKAVEIYASVAQLSPLDSETLENEANNIKMEAEENLEQLIDQKLDYEDLREDMRGKELEVKNLLEKGT
EQQTADQLLARADAAKALAEAAKGRDTLQEANDILNLLKDFDRRVNDNKTAEEALRKIPAINQTITE
ANEKTREAAQALGSAADATEAKNKAHEAERIAASAVQKNATSTKAEARTFAEVTDLNNEVNNMLKQLQE
AEKELKRKQDDADQDMMAGMASQAQAEINARKAKNSVTSLLSIINDLLEQLGLDVTDLNKLNEIEG
TLNKAKDEMKVSDLRKVSLENEAKKQEAAMIDYNRDIIEIMKDIRNLEDIRKTLPSGCFNTPSIEKP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK

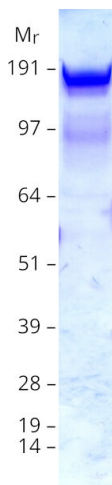


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Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Labeling Method:	Labeled with [U- ¹³ C ₆ , ¹⁵ N ₄]-L-Arginine and [U- ¹³ C ₆ , ¹⁵ N ₂]-L-Lysine
Buffer:	25 mM Tris-HCl, 100 mM glycine, pH 7.3
Storage:	Store at -80°C. Avoid repeated freeze-thaw cycles.
Stability:	Stable for 3 months from receipt of products under proper storage and handling conditions.
RefSeq:	NP_002284
RefSeq Size:	7923
RefSeq ORF:	4827
Synonyms:	LAMB2
Locus ID:	3915
UniProt ID:	P11047 , Q6NVY8
Cytogenetics:	1q25.3
Summary:	<p>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, composed of 3 non identical chains: laminin alpha, beta and gamma (formerly A, B1, and B2, respectively), have 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. [provided by RefSeq, Aug 2011]</p>
Protein Families:	Druggable Genome, Secreted Protein

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

Product images:



Coomassie blue staining of purified LAMC1 protein (Cat# [TP316928]). The protein was produced from HEK293T cells transfected with LAMC1 cDNA clone (Cat# [RC216928]) using MegaTran 2.0 (Cat# [TT210002]).