

## Product datasheet for PH324975

### Legumain (LGMN) (NM\_005606) Human Mass Spec Standard

#### Product data:

Product Type:	Mass Spec Standards
Description:	LGMN MS Standard C13 and N15-labeled recombinant protein (NP_005597)
Species:	Human
Expression Host:	HEK293
Expression cDNA Clone or AA Sequence:	RC224975
Predicted MW:	49.4 kDa
Protein Sequence:	>RC224975 protein sequence Red=Cloning site Green=Tags(s)

MVWKVAVFLSVALGIGAIPIDDPEDGGKHVVIVAGSNGWYNYRHQADACHAYQI IHRNGIPDEQIVVMM  
YDDIAYSEDNPTPGIVINRPNGTDVYQGVPKDYTGEDVTPQNFLAVLRGDAEAVKIGSGKVLKSGPQDH  
VFIYFTDHGSTGILVFPNEDLHVKDLNETIHMYKHKMYRKMVFYIEACESGSMNHLPDNINVYATTA  
NPRESSYACYDEKRSTYLGWYSVNWMESSDVEDLTKETLHKQYHLVKSHTNTSHVMQYGNKTIISTMKV  
MQFQGMKRKASSPVPLPPVTHLDLTPSPDVPLTIMKRKLMNTNDLEESRQLTEEIQRHLDARHLIEKSVR  
KIVSLLAASEAEVEQLLSERAPLTGHSCYPEALLHFRTHCFNWHSPTYEYALRHLVVLVNLCEKPYPLHR  
IKLSMDHVCLGHY

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag:	C-Myc/DDK
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- 13C6, 15N4]-L-Arginine and [U- 13C6, 15N2]-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:	<u>NP_005597</u>
RefSeq Size:	2073
RefSeq ORF:	1299
Synonyms:	AEP; LGMN1; PRSC1



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Locus ID: 5641

UniProt ID: [Q99538](#), [Q53XC6](#), [Q96CY7](#)

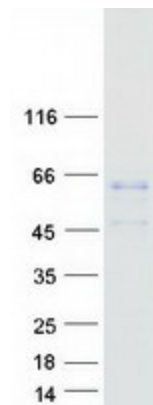
Cytogenetics: 14q32.12

**Summary:** This gene encodes a cysteine protease that has a strict specificity for hydrolysis of asparaginyl bonds. This enzyme may be involved in the processing of bacterial peptides and endogenous proteins for MHC class II presentation in the lysosomal/endosomal systems. Enzyme activation is triggered by acidic pH and appears to be autocatalytic. Protein expression occurs after monocytes differentiate into dendritic cells. A fully mature, active enzyme is produced following lipopolysaccharide expression in mature dendritic cells. Overexpression of this gene may be associated with the majority of solid tumor types. This gene has a pseudogene on chromosome 13. Several alternatively spliced transcript variants have been described, but the biological validity of only two has been determined. These two variants encode the same isoform. [provided by RefSeq, Jul 2008]

**Protein Families:** Druggable Genome, Protease

**Protein Pathways:** Antigen processing and presentation, Lysosome

### Product images:



Coomassie blue staining of purified LGMN protein (Cat# [TP324975]). The protein was produced from HEK293T cells transfected with LGMN cDNA clone (Cat# [RC224975]) using MegaTran 2.0 (Cat# [TT210002]).