

**LGMN Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP19953a****Specification**

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**LGMN Antibody (N-term) - Product Information**

Application	WB,E
Primary Accession	<a href="#">O99538</a>
Other Accession	<a href="#">O4R4T8</a> , <a href="#">NP_005597.3</a>
Reactivity	Human
Predicted	Monkey
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	49411
Antigen Region	83-112

**LGMN Antibody (N-term) - Additional Information****Gene ID** 5641**Other Names**

Legumain, Asparaginyl endopeptidase, Protease, cysteine 1, LGMN, PRSC1

**Target/Specificity**

This LGMN antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 83-112 amino acids from the N-terminal region of human LGMN.

**Dilution**

WB~~1:1000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

LGMN Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**LGMN Antibody (N-term) - Protein Information****Name** LGMN {ECO:0000303|PubMed:30425301, ECO:0000312|HGNC:HGNC:9472}**Function** Has a strict specificity for hydrolysis of asparaginyl bonds (PubMed:[23776206](#)). Can also

cleave aspartyl bonds slowly, especially under acidic conditions (PubMed:[23776206](#)). Involved in the processing of proteins for MHC class II antigen presentation in the lysosomal/endosomal system (PubMed:[9872320](#)). Also involved in MHC class I antigen presentation in cross-presenting dendritic cells by mediating cleavage and maturation of Perforin-2 (MPEG1), thereby promoting antigen translocation in the cytosol (By similarity). Required for normal lysosomal protein degradation in renal proximal tubules (By similarity). Required for normal degradation of internalized EGFR (By similarity). Plays a role in the regulation of cell proliferation via its role in EGFR degradation (By similarity).

**Cellular Location**

Lysosome.

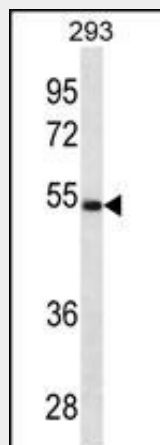
**Tissue Location**

Ubiquitous. Particularly abundant in kidney, heart and placenta.

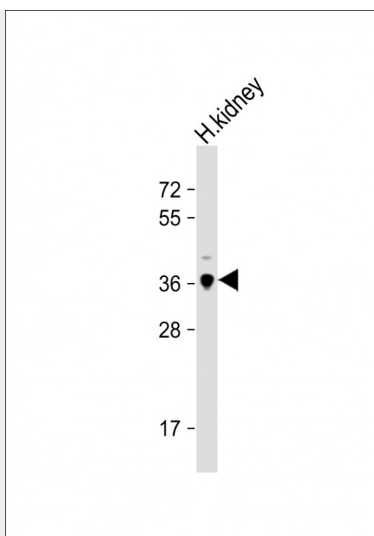
**LGMN Antibody (N-term) - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**LGMN Antibody (N-term) - Images**

LGMN Antibody (N-term) (Cat. #AP19953a) western blot analysis in 293 cell line lysates (35ug/lane). This demonstrates the LGMN antibody detected the LGMN protein (arrow).



Anti-LGMN Antibody (N-term) at 1:1000 dilution + human kidney lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 49 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

### **LGMN Antibody (N-term) - Background**

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.

### **LGMN Antibody (N-term) - References**

- Clerin, V., et al. Atherosclerosis 201(1):53-66(2008)
- Liu, Z., et al. Mol. Cell 29(6):665-678(2008)
- Oh, J.H., et al. Mamm. Genome 16(12):942-954(2005)
- Dusso, A.S., et al. Am. J. Physiol. Renal Physiol. 289 (1), F8-F28 (2005) :
- Murthy, R.V., et al. Clin. Cancer Res. 11(6):2293-2299(2005)