10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

LGMN Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19953a

Product Information

Application	WB, E
Primary Accession	Q99538
Other Accession	Q4R4T8, NP_005597.3
Reactivity	Human
Predicted	Monkey, Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41868
Calculated MW	49411
Antigen Region	83-112

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 E~~Use at an assay dependent concentration.
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.

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.

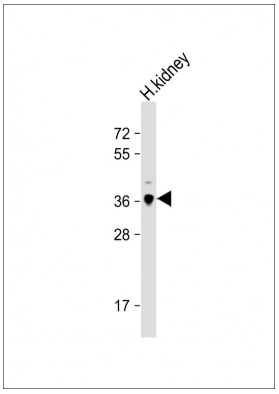
Background

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.

References

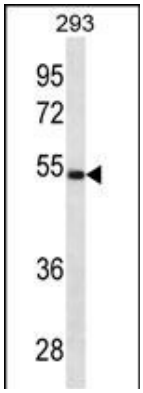
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Images



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



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