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Legumain Rabbit pAb

Catalog # AP98510

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q99538
Other Accession	Q99538
Reactivity	Human, Mouse
Predicted	Rat, Dog, Horse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	49411
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Legumain
Epitope Specificity	201-300/433
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the peptidase C13 family.
Post-translational modifications	Glycosylated.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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].

Additional Information

Gene ID	5641
Other Names	AEP; LGMN1; PRSC1; LGMN_HUMAN; LGMN; Asparaginyl endopeptidase (AEP); Protease, cysteine 1; 3.4.22.34; LGMN_MOUSE; LGMN_RAT; Asparaginyl endopeptidase; legumain; protease, cysteine, 1 (legumain)
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,Flow-Cyt=3ug /Test

Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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.

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