
Product Name: KD-Validated Legumain Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA00407

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,M
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 49.4kDa

Antigen Information

Gene Name	LGMN
Alternative Names	LGMN; Legumain; LGMN1; PRSC1; Protease, Cysteine, 1 (Legumain) ; Asparaginyl Endopeptidase; Protease, Cysteine 1; EC 3.4.22.34; Cysteine Protease 1; AEP
Gene ID	5641.0
SwissProt ID	Q99538
Immunogen	A synthesized peptide derived from human Legumain

Background

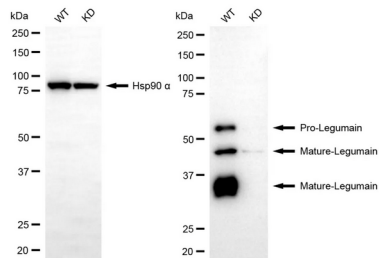
This gene encodes a cysteine protease that has a strict specificity for hydrolysis of asparaginyl bonds. This enzyme may be involved in the processing of bacterial peptides and endogenous proteins for MHC class II presentation in the lysosomal/endosomal systems. Enzyme activation is triggered by acidic 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. [provided by RefSeq, Jul 2008]

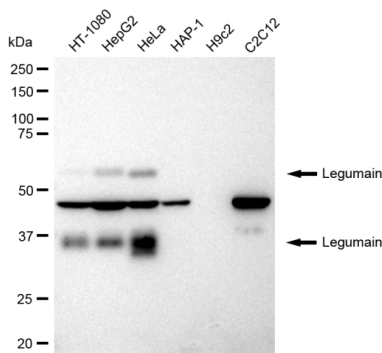
Research Area

Immunology,Signal Transduction,Cell Biology,Cancer,Metabolism

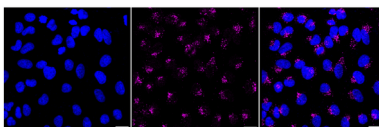
Image Data



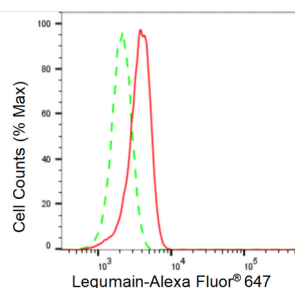
Western blotting analysis using Legumain antibody (KVA00407). Legumain expression in wild type (WT) and legumain shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with Legumain antibody (KVA00407, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using Legumain antibody (KVA00407). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Legumain antibody (KVA00407, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of HeLa cells with Legumain antibody (KVA00407, 1:1,000). Nuclei were stained blue with DAPI; Legumain was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Flow cytometric analysis of Legumain expression in HeLa cells using Legumain antibody (KVA00407, 1:2,000). Green, isotype control; red, Legumain.