

## **KD-Validated Anti-Legumain Rabbit Monoclonal Antibody**

Rabbit monoclonal antibody Catalog # AGI2191

#### **Specification**

## **KD-Validated Anti-Legumain Rabbit Monoclonal Antibody - Product Information**

Application WB, FC
Primary Accession Q99538
Reactivity Rat, Human
Clonality Monoclonal
Isotype Rabbit IgG

Calculated MW Predicted, 49 kDa, observed, 36,57 kDa

KDa

Gene Name LGMN

Aliases LGMN; Legumain; LGMN1; PRSC1;

Protease, Cysteine, 1 (Legumain); Asparaginyl Endopeptidase; Protease, Cysteine 1; EC 3.4.22.34; Cysteine

Protease 1; AEP

Immunogen A synthesized peptide derived from human

Legumain

## KD-Validated Anti-Legumain Rabbit Monoclonal Antibody - Additional Information

Gene ID **5641** 

**Other Names** 

Legumain, 3.4.22.34, Asparaginyl endopeptidase, AEP, Protease, cysteine 1, LGMN {ECO:0000303|PubMed:30425301, ECO:0000312|HGNC:HGNC:9472}

#### KD-Validated Anti-Legumain Rabbit Monoclonal Antibody - Protein Information

Name LGMN {ECO:0000303|PubMed:30425301, ECO:0000312|HGNC:HGNC:9472}

#### **Function**

Has a strict specificity for hydrolysis of asparaginyl bonds (PubMed:<a href="http://www.uniprot.org/citations/23776206" target="\_blank">23776206</a>). Can also cleave aspartyl bonds slowly, especially under acidic conditions (PubMed:<a href="http://www.uniprot.org/citations/23776206" target="\_blank">23776206</a>). Involved in the processing of proteins for MHC class II antigen presentation in the lysosomal/endosomal system (PubMed:<a href="http://www.uniprot.org/citations/9872320" target="\_blank">9872320</a>). 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**

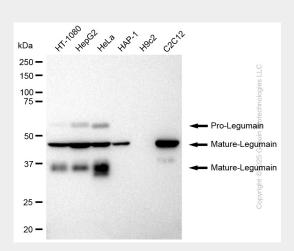
Ubiquitous. Particularly abundant in kidney, heart and placenta.

## KD-Validated Anti-Legumain Rabbit Monoclonal Antibody - Protocols

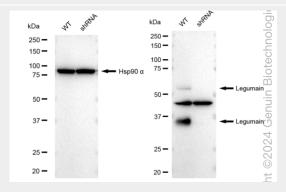
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **KD-Validated Anti-Legumain Rabbit Monoclonal Antibody - Images**



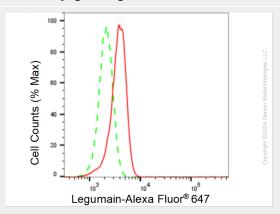
Western blotting analysis using anti-Legumain antibody (Cat#AGI2191). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Legumain antibody (Cat#AGI2191, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-Legumain antibody (Cat#AGI2191). Legumain expression in wild type (WT) and legumain shRNA knockdown (KD) HeLa cells with 30  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-Legumain antibody



# (Cat#AGI2191, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of Legumain expression in HeLa cells using Legumain antibody (Cat#AGI2191, 1:2,000). Green, isotype control; red, Legumain.