

# Legumain (K-15): sc-47104

## BACKGROUND

Legumain, also known as LGMN, AEP (asparaginyl endopeptidase) or PRSC1, is a 433 amino acid protein that localizes to the lysosome and belongs to the peptidase C13 family. Expressed ubiquitously with particularly high expression in placenta, heart and kidney, Legumain functions as a cysteine protease that specifically catalyzes the hydrolysis of asparaginyl and aspartyl bonds. Additionally, Legumain is thought to be involved in the processing of bacterial proteins for MHC class II antigen presentation in the lysosomal/endosomal system. Legumain exists as both a precursor and a fully mature, active enzyme that is produced in dendritic cells. Overexpression of Legumain may be associated with the formation of solid tumors, suggesting a role for Legumain in carcinogenesis. Multiple isoforms of Legumain exist due to alternative splicing events.

## CHROMOSOMAL LOCATION

Genetic locus: LGMN (human) mapping to 14q32.12; Lgm (mouse) mapping to 12 E.

## SOURCE

Legumain (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Legumain of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-47102 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

Legumain (K-15) is recommended for detection of precursor and mature Legumain of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Legumain (K-15) is also recommended for detection of precursor and mature Legumain in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for Legumain siRNA (h): sc-60930, Legumain siRNA (m): sc-60931, Legumain shRNA Plasmid (h): sc-60930-SH, Legumain shRNA Plasmid (m): sc-60931-SH, Legumain shRNA (h) Lentiviral Particles: sc-60930-V and Legumain shRNA (m) Lentiviral Particles: sc-60931-V.

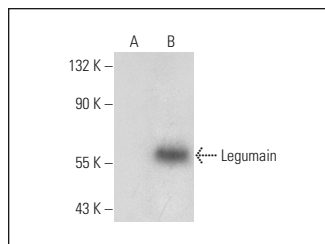
Molecular Weight of Legumain precursor: 56 kDa.

Molecular Weight of active Legumain: 46 kDa.

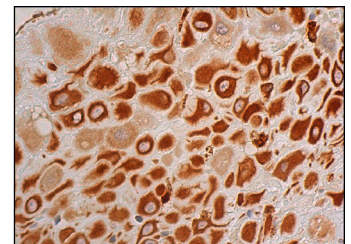
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



Legumain (K-15): sc-47104. Western blot analysis of Legumain expression in non-transfected: sc-110760 (A) and human Legumain transfected: sc-159634 (B) 293 whole cell lysates.



Legumain (K-15): sc-47104. Immunoperoxidase staining of formalin fixed, paraffin-embedded human placenta tissue showing cytoplasmic staining of decidual cells.

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## RESEARCH USE

For research use only, not for use in diagnostic procedures.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

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Satisfaction  
Guaranteed

Try **Legumain (B-8): sc-133234** or **Legumain (F-10): sc-271312**, our highly recommended monoclonal alternatives to Legumain (K-15).