**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; Lgmn (mouse) mapping to 12 E.

**SOURCE**

Legumain (B-10) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 80-100 near the N-terminus of Legumain of human origin.

**PRODUCT**

Each vial contains 200 µg IgGκ kappa light chain in 1.0 ml of PBS with <0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-166971 P, 100 µg peptide in 0.5 ml PBS containing <0.1% sodium azide and 0.2% stabilizer protein.

**APPLICATIONS**

Legumain (B-10) is recommended for detection of precursor and mature Legumain of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:10000), 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:30000).

Legumain (B-10) is also recommended for detection of precursor and mature Legumain in additional species, including canine, bovine and porcine.


Molecular Weight of Legumain precursor: 56 kDa.

Molecular Weight of active Legumain: 46 kDa.


**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:


**DATA**

![Western blot analysis of Legumain expression in RAW 264.7 (A), Neuro-2A (B), NRK (C) and NIH-3T3 (D) whole cell lysates.](image1)

**SELECT PRODUCT CITATIONS**


**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 for detailed protocols and support products.