



# Recombinant Rat Legumain (Lgmn)

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| <b>Product Code</b>      | CSB-BP012903RA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Abbreviation</b>      | Lgmn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Storage</b>           | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br>Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Uniprot No.</b>       | Q9R0J8                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Product Type</b>      | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Immunogen Species</b> | Rattus norvegicus (Rat)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purity</b>            | ≥85% (SDS-PAGE)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Sequence</b>          | VHI GVDDPEDGGK HWVIVAGSN GWYNYRHQAD ACHAYQIIHR<br>NGIPDEQIIV MMYDDIANNE ENPTPGVVIN RPNGTDVYKG VPKDYTGEDV<br>TPENFLAVLR GDEEAVKGKG SGKVLKSGPR DHVFVYFTDH GATGILVFPN<br>EDLHVKDLNK TIRYMYEHKM YQKMVFYIEA CESGSMMNHL PDDIDVYATT<br>AANPNESSYA CYYDEERSTY LGDWYSVNWM EDSDEVLTKE ETLHKQYHLV<br>KSHTNTSHVM QYGNKSISTM KVMQFQGMKH RASSPISLPP VTHLDLTPSP<br>DVPLTILKRK LLRTN                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Source</b>            | Baculovirus                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Target Names</b>      | Lgmn                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Protein Names</b>     | Recommended name: Legumain EC= 3.4.22.34 Alternative name(s):<br>Asparaginyl endopeptidase Protease, cysteine 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Expression Region</b> | 18-325                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Notes</b>             | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Tag Info</b>          | Tag type will be determined during the manufacturing process.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Protein Length</b>    | Full Length of Mature Protein                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Target Details</b>    | 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. |
| <b>Reconstitution</b>    | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |



concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

### **Shelf Life**

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.

Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.