Recombinant Mouse Legumain/LGMN Protein (His Tag)

Catalog Number: PKSM041191

Note: Centrifuge before opening to ensure complete recovery of vial contents.

| Description | |
|-------------------|--|
| Species Source | Mouse HEK293 Cells-derived Mouse Legumain/LGMN protein Val 18-Tyr 435, with an C- terminal His |
| Calculated MW | 48.7 kDa |
| Observed MW | 60 kDa |
| Accession | O89017 |
| Bio-activity | Not validated for activity |
| Properties | |
| Purity | > 95 % as determined by reducing SDS-PAGE. |
| Concentration | Subject to label value. |
| Endotoxin | < 1.0 EU per µg of the protein as determined by the LAL method. |
| Storage | Store at $<$ -20°C, stable for 6 months. Please minimize freeze-thaw cycles. |
| Shipping | This product is provided as liquid. It is shipped at frozen temperature with blue ice/ge |
| | packs. Upon receipt, store it immediately at $< -20^{\circ}$ C. |
| Formulation | Supplied as a 0.2 µm filtered solution of 20mM Tris-HCl, 150mM NaCl, 20% Glycerol |
| | pH 8.0. |
| Data | |
| | kDa MK R |
| | 120 |
| | 90 |
| | 60 |
| | 40 |
| | 30 |
| | 20 |
| | |
| | |

Background

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Mouse Legumain, also known as LGMN, is a cysteine protease belonging to peptidase family C13 and is expressed in kidney and placenta abundantly. LGMN has a strict specificity for hydrolysis of asparaginyl bonds. It can also cleave aspartyl bonds slowly, especially under acidic conditions. The mammalian legumain is involved in the processing of proteins for MHC class II antigen presentation in the lysosomal/endosomal system. It plays a role in the regulation of cell proliferation via its role in EGFR degradation. Legumain deficiency causes the accumulation of pro-Cathepsins B, H and L, another group of lysosomal cysteine proteases. Overexpression of Legumain in tumors is significant for invasion/ metastasis. Mammalian legumain is inhibited by iodoacetamide and maleimides. Legumain activation appears to be autocatalytic and can be triggered by acidic pH.