Human Legumain Protein, His Tag (active enzyme)

Catalog # LEN-H52H3

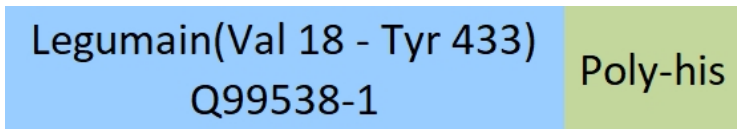
Synonym

AEP, LGMN1, PRSC1

Source

Human Legumain Protein, His Tag(LEN-H52H3) is expressed from human 293 cells (HEK293). It contains AA Val 18 - Tyr 433 (Accession # Q99538-1).
Predicted N-terminus: Val 18

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 49.5 kDa. The protein migrates as 55 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>95% as determined by SDS-PAGE.

Formulation

Supplied as 0.2 μm filtered solution in 20 mM Tris, 50 mM NaCl, PH7.5 with glycerol as protectant.

Contact us for customized product form or formulation.

Shipping

This product is supplied and shipped with dry ice, please inquire the shipping cost.

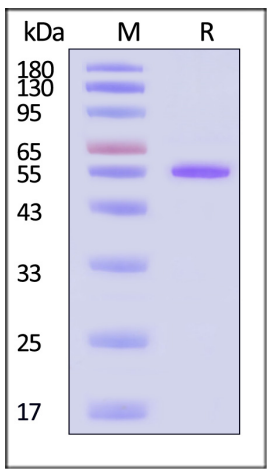
Storage

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- The product MUST be stored at -70°C or lower upon receipt;
- -70°C for 3 months under sterile conditions.

SDS-PAGE



Human Legumain Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With Star Ribbon Pre-stained Protein Marker).

Bioactivity

Measured by its ability to cleave the fluorogenic peptide substrate, N-carbobenzyloxy-Ala-Ala-Asn-7-amido-4-methylcoumarin (Z-AAN-AMC).
The specific activity is >280 pmol/min/μg (QC tested).

Background

This gene encodes a member of the cysteine peptidase family C13 that plays an important role in the endosome/lysosomal degradation system. The encoded inactive preproprotein undergoes autocatalytic removal of the C-terminal inhibitory propeptide to generate the active endopeptidase that cleaves protein substrates on the C-

terminal side of asparagine residues. Mice lacking the encoded protein exhibit defects in the lysosomal processing of proteins resulting in their accumulation in the lysosomes, and develop symptoms resembling hemophagocytic lymphohistiocytosis.