Active Recombinant Human LGMN, His-tagged

Cat. No. LGMN-7980H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human LGMN (Ile18-Tyr433) fused with an N-terminal 7-His tag, was expressed in Mouse NSO Cells.
Species	Human
Source	Mammalian Cells
ProteinLength	18-433 a.a.
Description	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.
Predicted N Terminal	His
Form	Supplied as a 0.2 μm filtered solution in Tris, NaCl and Glycerol.

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Bio-activity	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 >250 p mol/min/μg.
Molecular Mass	Predicted Molecular Mass:49 kDa SDS-PAGE:60 kDa, reducing conditions
Endotoxin	< 1.0 EU per 1 μg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Storage	Avoid repeated freeze-thaw cycles. 3 months from date of receipt, -70 °C as supplied. 1 month, -70 °C under sterile conditions after opening.

GENE INFORMATION

Gene Name	LGMN legumain [Homo sapiens (human)]
Official Symbol	LGMN
Synonyms	LGMN; AEP; LGMN1; PRSC1; legumain; cysteine protease 1; protease, cysteine 1; asparaginyl endopeptidase; protease, cysteine, 1 (legumain); EC 3.4.22.34
Gene ID	5641
mRNA Refseq	NM_005606
Protein Refseq	NP_005597
MIM	602620
UniProt ID	Q99538

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Chromosome Location	14q32.1
Pathway	Adaptive Immune System; Antigen processing and presentation; Immune System
Function	cysteine-type endopeptidase activity; peptidase activity

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