Datasheet for ABIN7196760

LGMN Protein (His tag)

1 Image

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Overview

Quantity:	50 µg
Target:	LGMN
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This LGMN protein is labelled with His tag.

Product Details

Purpose:	Recombinant Mouse Legumain/LGMN Protein (His Tag)(Active)
Sequence:	Val 18-Tyr 435
Characteristics:	A DNA sequence encoding the extracellular domain (Val 18-Tyr 435) of mouse LGMN (NP_035305.1) precursor was expressed with a C-terminal polyhistidine tag.
Purity:	> 75 % as determined by SDS-PAGE
Endotoxin Level:	< 1.0 EU per µg of the protein as determined by the LAL method.
Biological Activity Comment:	Measured by its ability to cleave the fluorogenic peptide substrate, N-carbobenzyloxy-Ala-Ala-Asn-7-amido-4-methyl coumarin(Z-AAN-AMC).The specific activity is > 350 pmoles/min/µg.(Activation description: The enzyme achieves its activity under acidic pH)

Target Details

Target:	LGMN

Target Details

Alternative Name:	Legumain/LGMN (LGMN Products)
Background:	Background: The Mammalian Legumain, also known as LGMN, also called asparaginyl endopeptidase (AEP), is a cysteine protease belonging to peptidase family C13 with a strict specificity for hydrolysis of asparaginyl bonds. Known previously only from plants and invertebrates, Legumain is discovered as a lysosomal endopeptidase in mammals. Mammalian Legumain is a cysteine endopeptidase, inhibited by iodoacetamide and maleimides, but unaffected by compound E64. The Mammalian Legumain is involved in the processing of bacterial peptides and endogenous proteins for MHC class II presentation in the lysosomal/endosomal systems. Legumain has been observed to be highly expressed in several types of solid tumors. It was demonstrated in membrane-associated vesicles concentrated at the invadopodia of tumor cells and on cell surfaces where it colocalized with integrins. Legumain was demonstrated to activate progelatinase A. Cells overexpressing Legumain possessed increased migratory and invasive activity in vitro and adopted an invasive and metastatic phenotype in vivo, inferring significance of Legumain in tumor invasion and metastasis. In addition, Legumain is expressed in both murine and human atherosclerotic lesions. The macrophage-specific expression of Legumain in vivo and ability of Legumain to induce chemotaxis of monocytes and endothelial cells in vitro suggest that Legumain may play a functional role in atherogenesis. Synonym: Legumain,Lgmn,Asparaginyl endopeptidase,Protease cysteine 1,Prsc1,AEP
Molecular Weight:	49.8 kDa
NCBI Accession:	NP_035305
Pathways:	Metabolism of Steroid Hormones and Vitamin D, Activation of Innate immune Response, Toll-Like Receptors Cascades

Application Details

Restrictions:	For Research Use only

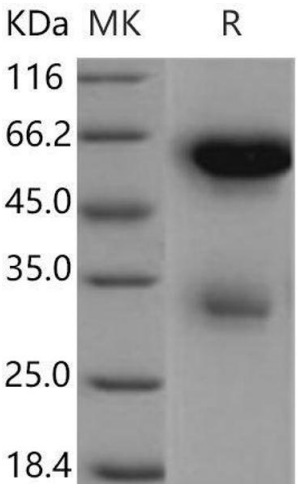
Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 25 mM Tris, 0.15M NaCl, 20 % Glycerol, pH 7.5
Storage:	4 °C,-20 °C,-80 °C

Handling

Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Images



Western Blotting

Image 1.