

Granzyme M (GZMM) Active Protein | GZMM active protein

Active Granzyme M (GZMM)

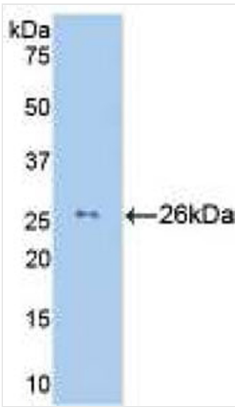
CATALOG # AAA21105	HOST E. coli	REACTIVITY Homo sapiens (Human)	APPLICATIONS Cell Culture, Activity Assay
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PRODUCT SYNONYMS

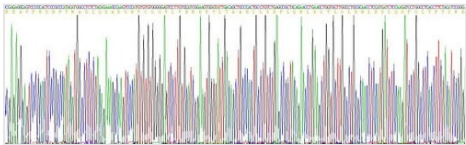
Granzyme M (GZMM); Active Granzyme M (GZMM); GZM-M; LMET1; MET1; Hu-Met-1; Met-ase; Lymphocyte Met Ase 1; Met-1 serine protease; Natural killer cell granular protease; GZMM active protein

PRODUCT SPECIFICATIONS

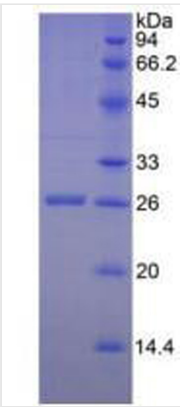
Host	E. coli
Reactivity	Homo sapiens (Human)
Purity/Purification	>92%
Form/Format	PBS, pH7.4, containing 0.01% SKL, 5% Trehalose.
Concentration	Original Concentration: 450ug/mL (varies by lot)
Applicable Applications for GZMM active protein	Cell Culture, Activity Assay
Application Notes	(May be suitable for use in other assays to be determined by the end user.)
Source	Prokaryotic expression.
Residues	Ile26~Ala257
Tags	N-terminal His-tag
Endotoxin Level	<1.0EU per 1ug (determined by the LAL method).
Predicted isoelectric point	10.3
Usage	Reconstitute in 10mM PBS (pH7.4) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
Preparation and Storage	Storage: Avoid repeated freeze/thaw cycles. Store at 2-8 degree C for one month. Aliquot and store at -80 degree C for 12 months. Stability Test: The thermal stability is described by the loss rate. The loss rate was determined by accelerated thermal degradation test, that is, incubate the protein at 37 degree C for 48h, and no obvious degradation and precipitation were observed. The loss rate is less than 5% within the expiration date under appropriate storage condition.



WB (Western Blot)
Western BlotSample: Recombinant GZMM, Human;Antibody: Rabbit Anti-Human GZMM Ab



Gene Sequencing (extract)



SDS-PAGE
SDS-PAGESample: Active recombinant GZMM, Human

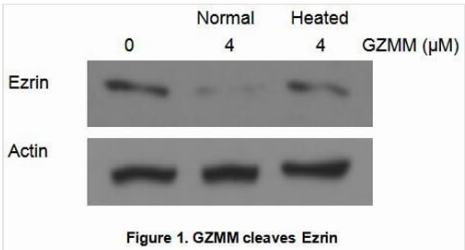


Figure 1. GZMM cleaves Ezrin

Activity
GZMM (Granzyme M) is one of the neutral serine proteases, which is specifically expressed by NK cells and mediates a novel major and perforin-dependent cell death pathway. Granzyme M has been proven to targets alpha-Tubulin and disorganizes the microtubule network, besides, Ezrin has also been identified as a substrate of GZMM. Therefore, a catalytic assay was conducted to detect the protease activity of recombinant human GZMM using Hela cells lysates. Briefly, protein lysates were extracted from 2×10⁷ Hela cells using Lysis Buffer, then incubated with normal or inactivated GZMM in 37oC for 4h. Samples were immunoblotted using Abs beta-actin as control, and Ezrin to detect the enzyme activity. The results were shown below. It is obvious that recombinant human GZMM cleaved Ezrin.

IIIGR EVIPHSRPYH ASLQRNGSHL
CGGVLVHPKW VLTAAHCLAQ RMAQLRLVLG LHTLDSPLT FHIKAAIQHP
RYKPVPALEN DLALLQLDGK VKPSRTIRPL ALPSKRQVVA AGTRCSMAGW
GLTHQGGRLS RVLRELDLQV LDTRMCNNSR FWNGSLSPSM VCLAADSKDQ
APCKGDSGGP LVCCKGRVLA RVLFSRVC TDIFKPPVAT AVAPYVSWIR
KVTGRSA

Sequence Information

ADDITIONAL INFORMATION

Product Categories/Family for GZMM active protein	Enzyme & Kinase
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NCBI AND UNIPROT INFORMATION

NCBI GI #	385275110
NCBI GeneID	3004
NCBI Accession #	NP_001245280.1
NCBI GenBank Nucleotide #	NM_001258351.1
UniProt Accession #	P51124
Molecular Weight	Predicted Molecular Mass: 26.3kDa Accurate Molecular Mass: 26kDa as determined by SDS-PAGE reducing conditions.
NCBI Official Full Name	granzyme M isoform 2

NCBI Official Synonym Full Names	granzyme M
NCBI Official Symbol	GZMM
NCBI Official Synonym Symbols	MET1; LMET1
NCBI Protein Information	granzyme M
UniProt Protein Name	Granzyme M
UniProt Gene Name	GZMM
UniProt Synonym Gene Names	MET1; Hu-Met-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/e-coli-homo-sapiens-human-active-protein/granzyme-m-gzmm/21105>