

## Active Recombinant Human GZMM protein, His-tagged

**Cat. No.** GZMM-98H    **Lot. No.** (See product label)

### SPECIFICATION

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Overview</b> | Recombinant Human GZMM protein(Ile26~Ala257), fused with N-terminal His tag, was expressed in E. coli.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Species</b>          | Human                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Source</b>           | E.coli                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>ProteinLength</b>    | Ile26~Ala257                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Form</b>             | 20mM Tris, 150mM NaCl, pH8.0, containing 0.05% sarcosyl and 5% trehalose                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Bio-activity</b>     | 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 $2 \times 10^7$ Hela cells using Lysis Buffer, then incubated with normal or inactivated GZMM in 37°C 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. |
| <b>Molecular Mass</b>   | 26.3kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>AA Sequence</b>      | MGHHHHHHSGSEF-IIGGR EVIPHSRPYM ASLQRNGSHL CGGVLVHPKW                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

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VLTAAHCLAQ RMAQLRLVLG LHTLDSPLT FHIKAAIQHP RYKPVPALEN  
DLALLQLDGK VKPSRTIRPL ALPSKRQVVA AGTRCSMAGW GLTHQGGRLS  
RVLRELDLQV LDTRMCNNSR FWNGSLSPSM VCLAADSKDQ APCKGDSGGP  
LVCGKGRVLA RVLSFSSRVC TDIFKPPVAT AVAPYVSWIR KVTGRSA

**Purity** >92%

**Storage** Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Aliquot and store at -80°C for 12 months.

**Reconstitution** Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vorte.

## GENE INFORMATION

**Gene Name** GZMM granzyme M (lymphocyte met-ase 1) [ Homo sapiens ]

**Official Symbol** GZMM

**Synonyms** GZMM; granzyme M (lymphocyte met-ase 1); granzyme M; LMET1; lymphocyte met ase 1; MET1; met-ase; HU-Met-1; lymphocyte met-ase 1; Met-1 serine protease; natural killer cell granular protease;

**Gene ID** 3004

**mRNA Refseq** NM\_005317

**Protein Refseq** NP\_005308

**MIM** 600311

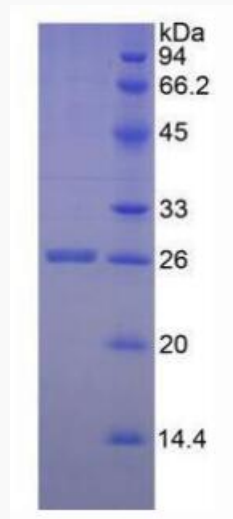
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UniProt ID P51124

SDS-PAGE



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