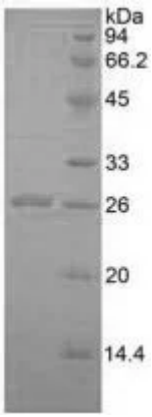
Active Granzyme M (GZMM)

Catalog#:PEH12365

概述（Summary）

别称（Alternative Names）	GZM-M; LMET1; MET1; Hu-Met-1; Met-ase; Lymphocyte Met Ase 1; Met-1 serine protease; Natural killer cell granular protease
纯度（Purity）	Greater than 90% as determined by reducing SDS-PAGE.
内毒素（Endotoxin level）	Please contact with the lab for this information
蛋白构建（Construction）	【Ile26-Ala257】
Accession #	P51124
表达宿主（Host）	E.coli
种属（Species）	Homo sapiens (Human)
预测分子量（Predicted MW）	26.3 kDa
制剂（Form）	Lyophilized from a 0.2 μm filtered solution of 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
运输方式（Shipping）	The product is shipped with ice bag. Upon receipt, store it immediately at the temperature listed below.
稳定性&储存（Stability &Storage）	12 months at -20°C to -80°C in lyophilized state.6 months at -20°C to -80°C under sterile conditions after reconstitution.7-10 days at 2°C to 8°C under sterile conditions after reconstitution.Please minimize freeze-thaw cycles.
复溶（Reconstitution）	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.
背景介绍（References）	Cleaves peptide substrates after methionine, leucine, and norleucine. Physiological substrates include EZR, alpha-tubulins and the apoptosis inhibitor BIRC5/Survivin. Promotes caspase activation and subsequent apoptosis of target cells.

电泳图（SDS-PAGE image）



Greater than 90% as determined by reducing SDS-PAGE.

活性图（Bioactivity image）

$$\text{Specific Activity (pmol/min/ug)} = \frac{\text{Adjusted } V_{max}^{*} \text{ (OD/min) x well volume (L) x } 10^{12} \text{ pmol/mol}}{\text{ext. coeff}^{**} \text{ (M}^{-1}\text{cm}^{-1}\text{) x path corr.}^{***} \text{ (cm) x amount of enzyme (ug)}}$$

*Adjusted for Substrate Blank
**Using the extinction coefficient 13800 $M^{-1}cm^{-1}$
***Using the path correction 0.320 cm

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 a-Tubulin and disorganizes the microtubule network, besides, Ezrin has also been identified as a substrate of GZMM. Human granzyme M is synthesized as a precursor (264 residues) with a signal peptide (residues 1 23), a propeptide (residues 24-25) and a mature chain (residues 26-257). The purified recombinant human Granzyme M consists of residues 26 to 257 which activity was measured by its ability to cleaves a thioester substrate Z-Lys-SBzl•HCl. The reaction was performed in 0.05 M Tris, 0.15 M NaCl, 0.01% Triton X-100, pH 8.0 (assay buffer), initiated by addition 50 µL of various concentrations of GZMM (diluted by assay buffer) to 50 µL of 1.2 mM substrate and DTNB mixture. The final well serves as a negative control with no GZMM, replace with 50 µL assay buffer. Incubated at 25℃ for 5min, then read at a wavelength of 405 nm. The specific activity of recombinant human Granzyme M is >80 pmol/min/µg.

注意事项（Note）

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