

APA431Hu01 10µg
Active Granzyme M (GZMM)
Organism Species: Homo sapiens (Human)
Instruction manual

FOR RESEARCH USE ONLY
NOT FOR USE IN CLINICAL DIAGNOSTIC PROCEDURES

13th Edition (Revised in Aug, 2023)

[PROPERTIES]

Source: Prokaryotic expression.

Host: *E. coli*

Residues: Ile26~Ala257

Tags: N-terminal His-tag

Purity: >92%

Endotoxin Level: <1.0EU per 1µg (determined by the LAL method).

Buffer Formulation: 20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA and 5% trehalose.

Applications: Cell culture; Activity Assays.

(May be suitable for use in other assays to be determined by the end user.)

Predicted isoelectric point: 10.3

Predicted Molecular Mass: 26.3kDa

Accurate Molecular Mass: 26kDa as determined by SDS-PAGE reducing conditions.

[USAGE]

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

[STORAGE AND STABILITY]

Storage: Avoid repeated freeze/thaw cycles.

Store at 2-8°C for one month.

Aliquot and store at -80°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°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.

[SEQUENCE]

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IIIGGR EVIPHSRPYM ASLQRNGSHL  
CGGVLVHPKW VLTAAHCLAQ RMAQLRLVLG LHTLDSPGLT FHIKAAIQHP  
RYKPVPALEN DLALLQLDGK VKPSRTIRPL ALPSKRQVVA AGTRCSMAGW  
GLTHQGGRLS RVLRELDLQV LDTRMCNNSR FWNGSLSPSM VCLAADSKDQ  
APCKGDSGGP LVCCKGRVLA RVLFSSSRVC TDIFKPPVAT AVAPYVSWIR  
KVTGRSA
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[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 α -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 μ L of various concentrations of GZMM (diluted by assay buffer) to 50 μ L of 1.2 mM substrate and DTNB mixture. The final well serves as a negative control with no GZMM, replace with 50 μ L assay buffer. Incubated at 25°C for 5min, then read at a wavelength of 405 nm. The specific activity of recombinant human Granzyme M is >80 pmol/min/ μ g.

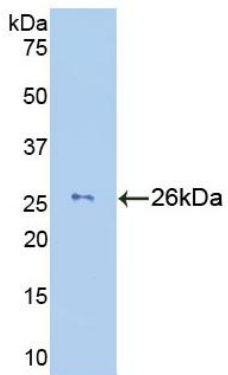


Figure 3. Western Blot

Sample: Recombinant GZMM, Human;

Antibody: Rabbit Anti-Human GZMM Ab (PAA431Hu01)

[IMPORTANT NOTE]

The kit is designed for research use only, we will not be responsible for any issue if the kit was used in clinical diagnostic or any other procedures.