

# Recombinant human Granzyme B protein

Catalog Number: ATGP3774

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

19-247aa

### UniProt No.

P10144

### NCBI Accession No.

NP\_004122.2

### Alternative Names

Granzyme B isoform 1, GZMB, C11, CCPI, CGL-1, CGL1, CSP-B, CSPB, CTLA1, CTSLG1, HLP, SECT

## PRODUCT SPECIFICATION

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### Molecular Weight

26.5 kDa (235aa)

### Concentration

0.5mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 20% glycerol, 1mM DTT

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Specific activity is > 2,500pmol/min/ug, and is defined as the amount of enzyme that cleave 1pmole of Boc-Ala-Ala-Asp-SBzl at 37C.

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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## Description

GZMB, also known as granzyme B isoform 1, is member of the granzyme subfamily of proteins, part of the peptidase S1 family of serine proteases. This protein is secreted by natural killer (NK) cells and cytotoxic T lymphocytes (CTLs) and proteolytically processed to generate the active protease, which induces target cell apoptosis. Also, it processes cytokines and degrades extracellular matrix proteins, and these roles are implicated in chronic inflammation and wound healing. Expression of this gene may be elevated in human patients with cardiac fibrosis. Recombinant human GZMB, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

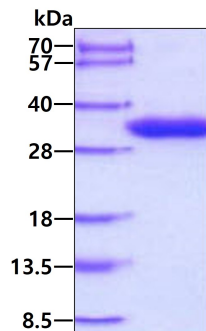
GEIIGGHEAK PHSRPY MAYL MIWDQKSLKR CGGFLIRDDF VLTAHCWGS SINVTLG AHN IKEQEPTQQF IPVKRPIPHP  
AYNPKNFSND IMLLQLERKA KRTRAVQPLR LPSNKAQVKP GQTCSVAGWG QTAPLGK HSH TLQEVKMTVQ EDRKCESDLR  
HYDSTIELC VGDPEIKKTS FKGDSGGPLV CNKVAQGIVS YGRNNGMPPR ACTKVSSFVH WIKKTMKRY<H HHHHH>

## General References

Poe M., et al, (1991) J. Biol. Chem. 266:98-103.  
Xu W., et al, (2014) Eur. J. Immunol. 44(1) 275-284.

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain