Recombinant human Granzyme B protein

Catalog Number: ATGP3774

PRODUCT INFORMATION

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, CTSGL1, HLP, SECT

PRODUCT SPECIFICATION

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. Tis 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

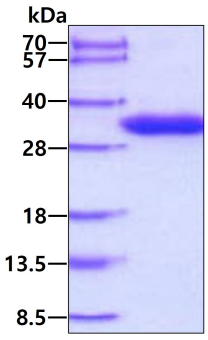
GEIIGGHEAK PHSRPYMAYL MIWDQKSLKR CGGFLIRDDF VLTAAHCWGS SINVTLGAHN IKEQEPTQQF IPVKRPIPHP AYNPKNFSND IMLLQLERKA KRTRAVQPLR LPSNKAQVKP GQTCSVAGWG QTAPLGKHSH TLQEVKMTVQ EDRKCESDLR HYYDSTIELC VGDPEIKKTS FKGDSGGPLV CNKVAQGIVS YGRNNGMPPR ACTKVSSFVH WIKKTMKRY<H HHHHH>

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



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain