

**AR51798PU-S****Human Granzyme B (GZMB) (21-247, His-tag) - Purified****Alternate names:**

CGL1, CSPB, CTLA-1, CTLA1, CTSLG1, Cathepsin G-like 1, Cytotoxic T-lymphocyte proteinase 2, Fragmentin-2, GRB, Granzyme-2, Lymphocyte protease, SECT, T-cell serine protease 1-3E

**Quantity:**

0.1 mg

**Background:**

GZMB also known as granzyme B is crucial for the rapid induction of target cell apoptosis by CTL in cell-mediated immune response. Cytolytic T lymphocytes (CTL) and natural killer (NK) cells share the remarkable ability to recognize, bind, and lyse specific target cells. They are thought to protect their host by lysing cells bearing on their surface nonself antigens, usually peptides or proteins resulting from infection by intracellular pathogens.

**Uniprot ID:**

[P10144](#)

**NCBI:**

[NP\\_004122](#)

**GeneID:**

[3002](#)

**Species:**

Human

**Source:**

E. coli

**Format:**

**State:** Liquid purified protein  
**Purity:** >85% by SDS - PAGE  
**Buffer System:** 20 mM Tris 8.0 containing 10% glycerol.

**Description:**

Recombinant human GZMB, fused to His-tag at N-terminus, was expressed in E.coli.

**AA Sequence:**

MGSSHHHHHH SSGLVPRGSH MIIGGHEAKP HSRPYMAYLM IWDQKSLKRC GGFLIQDDFV  
LTAAHCWGSS INVTLGAHNI KEQEPTQQFI PVKRPPIHPA YNPKNFSNDI MLLQLERKAK  
RTRAVQPLRL PSNKAQVKPG QTCSVAGWGQ TAPLGKHSHT LQEVKMTVQE DRKCESDLRH  
YYDSTIELCV GDPEIKKTSF KGDSGGPLVC NKVAQGIVSY GRNNGMPPRA CTKVSSSFVHW  
IKKTMKRY

**Molecular weight:** 27.8 kDa (248aa)

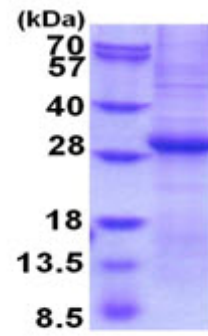
**Storage:**

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:**

1. Xu W, Narayanan P, Kang N, Clayton S, Ohne Y, Shi P, et al. Human plasma cells express granzyme B. *Eur J Immunol.* 2014 Jan;44(1):275-84. doi: 10.1002/eji.201343711. Epub 2013 Oct 20. PubMed PMID: 24114594.
2. Fritsch K, Finke J, Grüllich C. Suppression of granzyme B activity and caspase-3 activation in leukaemia cells constitutively expressing the protease inhibitor 9. *Ann Hematol.* 2013 Dec;92(12):1603-9. doi: 10.1007/s00277-013-1846-6. Epub 2013 Jul 28. PubMed PMID: 23892923.

Pictures:



15% SDS-PAGE (3ug)