

## Granzyme B, Mouse Recombinant (Insect)

**CATALOG #:** 7608-5  
**AMOUNT:** 5 µg  
**SOURCE:** Insect Cells  
**PURITY:** ≥90% by SDS-PAGE  
**SPECIFIC ACTIVITY:** ≥40 units/µg  
**MOL. WEIGHT:** 33 kDa (227 aa, 21-247)

**FORMULATION:** rmGranzyme is supplied as a lyophilized powder.

**RECONSTITUTION:** Use 50 µl sterile D.I. water to dissolve 5 µg protein to a final conc of 0.1 µg protein/µl.

**STORAGE CONDITIONS:** Stable for 1 year at -70°C. Avoid multiple freeze/thaw cycles as activity may decrease.

### DESCRIPTION:

Granzyme B (GZMB) is a serine protease stored in granules of activated cytotoxic T cells and NK cells. Upon target cell contact, granzyme B is directionally exocytosed and enters the target cell, assisted by perforin. With its unique substrate specificity (granzyme B cleaves after Asp), granzyme B processes and activates various pro-caspases thereby inducing apoptosis in the target cell.

### APPLICATION AND USAGE:

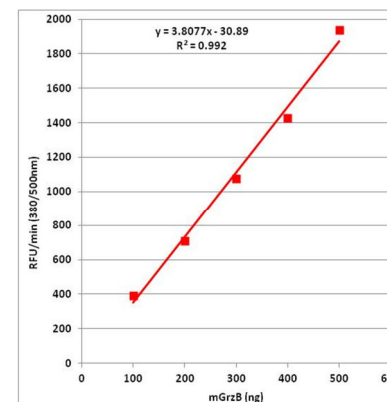
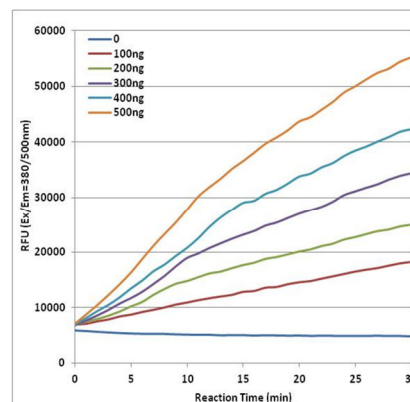
Active GZMB is useful in studying enzyme regulation, determining target substrates, screening GZMB inhibitors, or as a positive control in GZMB activity assays. We recommend using 0.1-0.2 µg protein and 100 µM substrate IETD-AFC per assay for analyzing GZMB activity.

### BIOLOGICAL ACTIVITY:

Activity of GZMB was tested using the synthetic peptide, IETD-AFC, as a substrate. GZMB releases AFC and then the GZMB activity can be quantified by fluorescent detection of free AFC at Ex/Em = 380/500 nm.

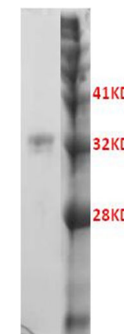
### UNIT DEFINITION:

One unit is defined as the amount of enzyme that hydrolyzes 1 pmol/min of IETD-AFC per min at 37°C in 50 mM HEPES, pH 7.5 containing 10 mM CaCl<sub>2</sub>.



**GZMB Activity Assay:** The activity of mouse GZMB was determined using 100 µM substrate IETD-AFC in a buffer containing 50 mM HEPES, pH 7.5 containing 10 mM CaCl<sub>2</sub> at 37°C.

### SDS-PAGE analysis of rmGranzyme B



### RELATED PRODUCTS:

- Granzyme A, human recombinant (Cat. No. 4279-10, -50, -1000)
- Granzyme B, active human recombinant (Cat. No. 4728-5)
- Granzyme B, human recombinant (Cat. No. 1118-5)
- Granzyme B Antibody (Cat. No. 3073R-100)
- Granzyme B Blocking Peptide (Cat. No. 3073BP-50)
- Granzyme B, M Antibody (Clone B18.1) (Cat. No. 3073-100)
- Granzyme B inhibitor Ac-IEPD-CHO (Cat. No. 1119-1)
- Granzyme B inhibitor Z-AAD-CH2Cl (Cat. No. 1128-20C)

**FOR RESEARCH USE ONLY! Not to be used on humans.**