

Granzyme B, Mouse Recombinant (Insect)

CATALOG #: 7608-5
AMOUNT: 5 µg
SOURCE: Insect Cells
PURITY: ≥90% by SDS-PAGE
SPECIFIC ACTIVITY: ≥40 mU/mg
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:

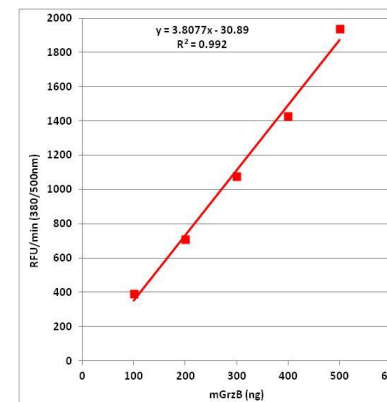
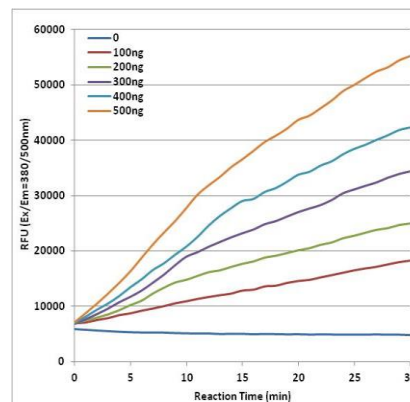
Active GZMB is useful in studying enzyme regulation, determining target substrates, screening GZMB inhibitors, or as a positive control in GZMB activity assays. We recommend using 0.1-0.2 µg protein and 100 uM substrate IETD-AFC per assay for analyzing GZMB activity.

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 µmol/min of Ac-IETD-AFC per min at 37 °C in 50 mM HEPES, pH 7.5, 10 mM CaCl₂.



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 CaCl₂ 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-IETD-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.