Granzyme B, Human Recombinant (Insect)

CATALOG #: 4728-5 5 µg

SOURCE: Insect Cells

PURITY: ≥90% by SDS-PAGE

SPECIFIC ACTIVITY: ≥20 mU/ma

MOL. WEIGHT: 32 kDa (227 aa, 21-247)

FORMULATION: Lyophilized powder from 0.22 µm filtered solution in PBS

containing 8% trehalose.

STORAGE CONDITIONS: Stable for 1 year at -70 °C. After reconstitution, aliquot and

store at -20 °C and use within 3 months. Avoid repeated

rev 06/20

freeze-thaw cycles.

RECONSTITUTION: Use 50 µl sterile D.I. water to dissolve 5 µg protein to a final

conc of 0.1 µg protein/µl

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 assisted by perforin, enters the target cell. 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: Active GZMB is useful in studying enzyme regulation,

determining target substrates, screening GZMB inhibitors, or

as a positive control in GZMB activity assays.

BIOLOGICAL ACTIVITY: Activity of GZMB was tested using the synthetic peptide, Ac-

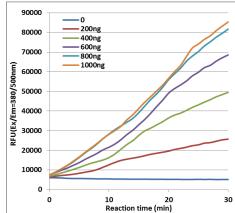
> IETD-AFC, as a substrate. GZMB releases AFC and then the GZMB activity can be quantified by fluorescent detection of

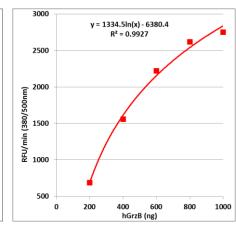
free AFC at Ex/Em=380/500 nm.

UNIT DEFINITION: One unit of Granzyme B is defined as the amount of enzyme

that hydrolyzes 1 µmol/min of Ac-IETD-AFC per min at 37 °C

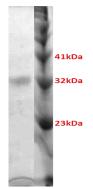
in 50 mM HEPES, pH 7.5, 10 mM CaCl₂.





GzmB Activity Assay: The activity of 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.





RELATED PRODUCTS:

- Granzyme A, human recombinant (Cat. No. 4279-10, -50, -1000)
- 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-CH2CI (Cat. No. 1128-20C)

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

