

Human CellExp™ Granzyme B, Human Recombinant

CATALOG NO:	7233-10	10 µg
ALTERNATE NAMES:	GZMB, CCPI, CGL-1, CGL1, CSP-B, CSPB, CTLA1, CTSLG1, HLP, SECT, Fragmentin-2, Granzyme B, Granzyme-2, GRB	
SOURCE:	HEK 293 cells (Ile 21 - Tyr 247)	
PURITY:	> 95% by SDS-PAGE	
MOL. WEIGHT:	The protein is fused with 6xHis tag at the C-terminus, has a calculated MW of ~27 kDa. The protein migrates as 35 kDa in SDS-PAGE under reducing conditions due to glycosylation.	
FORM:	Lyophilized	
FORMULATION:	Lyophilized from 0.22 µm filtered solution in PBS. Generally 5-8% mannitol or trehalose is added as a protectant before lyophilization.	
STORAGE CONDITIONS:	Store at -20°C. After reconstitution, aliquot and store at -20°C and use within 3 months. Avoid repeated freeze-thaw cycles.	
RECONSTITUTION:	Centrifuge the vial prior to opening. Reconstitute in sterile PBS, pH 7.4. Do not vortex. Store the solution in aliquots at -20°C for long term storage.	
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. Elevated abundance of Granzyme B is also implicated in autoimmune diseases, skin disorders and type 1 diabetes.	
SPECIFIC ACTIVITY:	The activity of Granzyme B was determined using 100 µM substrate Ac-IETD-AFC in a buffer containing 50 mM HEPES pH 7.5, 10 mM CaCl ₂ at 37°C.	

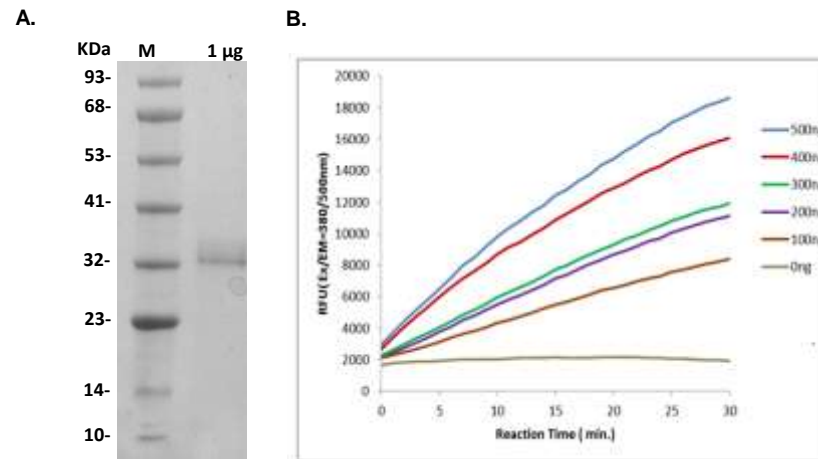


Fig A. SDS-PAGE (4-20%) of Recombinant GZMB: Recombinant protein loaded under reducing conditions and stained with Coomassie Blue. The protein migrates as 35 kDa in SDS-PAGE under reducing conditions due to glycosylation.

Fig B. Specific activity: The activity of GZMB was determined using 100 µM substrate Ac-IETD-AFC in a buffer containing 50 mM HEPES pH 7.5, 10 mM CaCl₂

RELATED PRODUCT:

- Granzyme A, human recombinant (**Cat. No. 4279-10, -50, -1000**)
- Granzyme B, human recombinant (*E. coli*) (**Cat. No. 1118-5**)
- Granzyme B, human recombinant (Insect) (**Cat. No. 4728-5**)
- Granzyme B, mouse recombinant (Insect) (**Cat. No. 7608-5**)
- Granzyme B Activity Fluorometric Assay Kit (**Cat. No. K168-100**)
- Granzyme B Inhibitor Screening Kit (Fluorometric) (**Cat. No. K169-100**)
- Granzyme B Antibody (**Cat. No. 3173-100**)
- Granzyme B Antibody (**Cat. No. 3073R-100**)
- Granzyme B Antibody (Clone B18.1) (**Cat. No. 3073-100**)
- Granzyme B Blocking Peptide (**Cat. No. 3073RBP-50**)
- Granzyme B Inhibitor Ac-IEPD-CHO (**Cat. No. 1119-1-50**)
- Granzyme B Inhibitor Z-AAD-CH2Cl (**Cat. No. 1128-20C**)

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