

Product datasheet for **DM1208**

Granzyme B (GZMB) Mouse Monoclonal Antibody [Clone ID: GM4C1]

Product data:

Product Type:	Primary Antibodies
Clone Name:	GM4C1
Applications:	ELISA, FC
Recommended Dilution:	Flow Cytometry: 1.2 µg/10 ⁶ cells. ELISA: 1/200–1/400. Cell based ELISA with intact, transiently transfected cells: 1/200–1/400.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Genetic immunisation with cDNA encoding human Granzyme B
Specificity:	This antibody recognizes Granzyme B (GZMB).
Formulation:	Phosphate buffered saline, pH 7.2 State: Purified State: Liquid purified Ig fraction.
Concentration:	lot specific
Purification:	Affinity Chromatography on Protein G.
Conjugation:	Unconjugated
Storage:	Store the antibody undiluted at 2–8°C for one month or (in aliquots) at –20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	granzyme B



Database Link: [Entrez Gene 3002 Human](#)
[PI0144](#)

Background: Granzyme B (GrB) is a 27 kDa caspase-like serine protease that is released by activated cytotoxic T cells and natural killer cells to kill virus-infected and tumor cells (1). The enzymatic activity of granzyme B is considered essential to its ability to induce cell death through the activation of caspases. It has the strongest apoptotic activity of all granzymes, as a result of its caspase-like ability to cleave substrates at key aspartic acid residues (1,2). GrB is involved in several pathologies including viral infections, graft rejection, graft-vs.-host disease (2,3), rheumatoid arthritis and plays an important role in antitumour immune responses (2).

Synonyms: Granzyme-2, CGLI, CTSGLI, CSPB, CTLA1, CTLA-1, GRB, SECT, Fragmentin-2

Note: **Selection:** Based on recognition of the complete native protein expressed on transfected mammalian cells.

Product images:

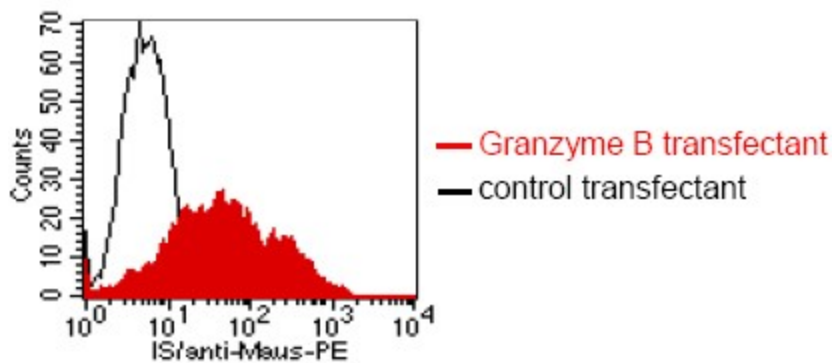


Figure.1: FACS analysis of BOSC23 cells using Granzyme B antibody. BOSC23 cells were transiently trans-fected with an expression vector encoding either Granzyme B (red curve) or an irrelevant protein (control-transfectant: black curve). Binding of GM-4C1 was detected with a PE-conjugated secondary antibody. A positive signal was obtained only with Granzyme B trans-fected cells.

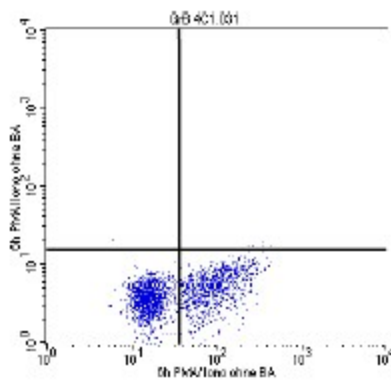


Figure.2: Intracellular detection of Granzyme B in human PBMC by FACS analysis using Granzyme B antibody. PBMC were cultivated in the presence of phorbol ester and ionomycin subsequently fixed and permeabilised. Binding of Granzyme B antibody was detected with a FITC-conjugated secondary antibody.

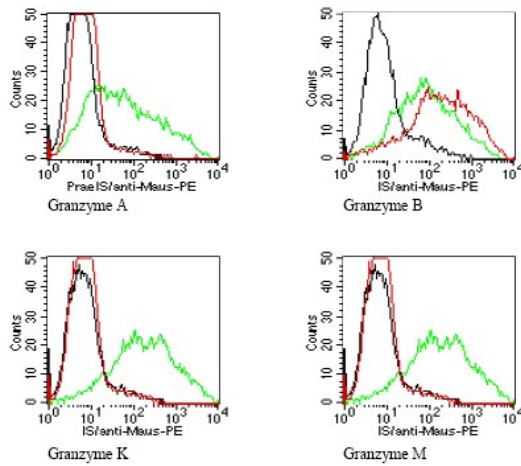


Figure.3 : BOSC cells were transiently transfected with expression vectors for Granzyme A, B, K, or M. Expression of the constructs was tested with an anti-tag monoclonal antibody (green curves), an irrelevant monoclonal antibody served as negative control (black curves). For specificity testing, purified Granzyme B antibody was tested on all transfectants. A positive signal was obtained only with Granzyme B transfected cells (red curves).