

ARG22617 anti-Granzyme B antibody [GB11]

Package: 50 µg

Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [GB11] recognizes Granzyme B This antibody recognizes the serine protease Granzyme B, which is important in the induction of apoptosis in target cells by cytolytic lymphocytes (CTLs). Granzyme B plays a key role in the induction of apoptosis by CTLs. After delivery to the target cell, Granzyme B activates the cascade of caspases that finally results in cell death. In normal peripheral blood approximately 20% of CD8+ve T cells have been found to express Granzyme B.
Tested Reactivity	Hu, Chimp, Mk, R. Mk
Tested Application	CyTOF®-candidate, ELISA, FACS, ICC/IF, IHC-Fr, IP
Host	Mouse
Clonality	Monoclonal
Clone	GB11
Isotype	IgG1
Target Name	Granzyme B
Species	Human
Immunogen	Purified Human Granzyme B.
Conjugation	Un-conjugated
Alternate Names	EC 3.4.21.79; CTLA-1; CSP-B; Granzyme B; CTLA1; CCPI; CGL-1; CGL1; Cytotoxic T-lymphocyte proteinase 2; T-cell serine protease 1-3E; HLP; CTSG1; in-2; Cathepsin G-like 1; SECT; Granzyme-2; Human lymphocyte protein; C11; CSPB; Lymphocyte protease

Application Instructions

Application table	Application	Dilution
	CyTOF®-candidate	Assay-dependent
	ELISA	2 µg/ml - 5 µg/ml
	FACS	1:10 - 1:100
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IP	Assay-dependent
Application Note	FACS: Use 10 µl of the suggested working dilution to label 10 ⁶ cells or 100 µl whole blood. Membrane permeabilisation is required for this application. ELISA: This antibody has been reported to function as a capture reagent in sandwich ELISA assays for soluble Granzyme B in conjunction with a biotin conjugated antibody as detection reagent. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

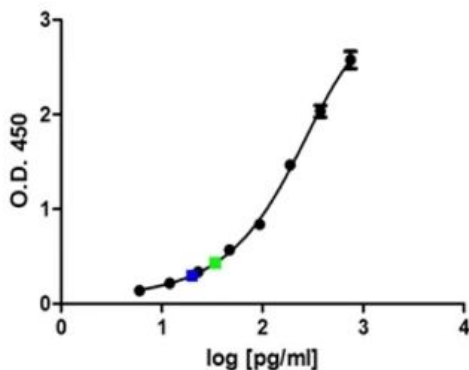
Properties

Form	Liquid
Purification	Purification with Protein A.
Buffer	Tris buffered saline and 0.09% Sodium azide.
Preservative	0.09% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	GZMB
Gene Full Name	granzyme B (granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1)
Background	Granzyme B is a member of the granzyme subfamily of proteins, part of the peptidase S1 family of serine proteases. The encoded preproprotein is secreted by natural killer (NK) cells and cytotoxic T lymphocytes (CTLs) and proteolytically processed to generate the active protease, which induces target cell apoptosis. This protein also processes cytokines and degrades extracellular matrix proteins, and these roles are implicated in chronic inflammation and wound healing. Expression of this gene may be elevated in human patients with cardiac fibrosis. [provided by RefSeq, Sep 2016]
Function	Granzyme B is necessary for target cell lysis in cell-mediated immune responses. It cleaves after Asp. Seems to be linked to an activation cascade of caspases (aspartate-specific cysteine proteases) responsible for apoptosis execution. Cleaves caspase-3, -7, -9 and 10 to give rise to active enzymes mediating apoptosis. [UniProt]
Highlight	Related products: Granzyme B antibodies ; Granzyme B ELISA Kits ; Anti-Mouse IgG secondary antibodies ; Related news: CyTOF-candidate Antibodies Examining CTL/NK-mediated cytotoxicity by ELISA Anti-SerpinB9 therapy, a new strategy for cancer therapy
Calculated Mw	28 kDa

Images



ARG22617 anti-Granzyme B antibody [GB11] standard curve image

Sandwich ELISA: ARG22617 anti-Granzyme B antibody [GB11] as a capture antibody and biotinylated Mouse anti Human granzyme B as a detection antibody with recombinant Human granzyme B as antigen. Detection is by HRP conjugated streptavidin and substrate. It results of a typical standard run with optical density reading at 450 nm. Human plasma samples are diluted at i:2 (green) and 1:4 (blue).