

## PE/Cyanine7 anti-human/mouse Granzyme B Recombinant Antibody

<b>Catalog# / Size</b>	396409 / 25 tests 396410 / 100 tests
<b>Clone</b>	QA18A28
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1, GZMB, CCP1, Asp-aseGranzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1, GZMB, CCP1, Asp-ase
<b>Isotype</b>	Rat IgG1, $\kappa$
<b>Description</b>	Granzyme B is a 32 kD serine protease, also known as granzyme-2, serine protease B, CCP1, Asp-ase, and CTLA-1. Granzyme B is abundantly stored in the granules of cytotoxic T lymphocytes and NK cells. Low level of expression has been reported in granulocytes, B cells, and activated dendritic cells. Granzyme B is crucial for rapid induction of cell death and apoptosis through interaction with mannose-6-phosphate receptor.

### Product Details

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<b>Verified Reactivity</b>	Human, Mouse
<b>Antibody Type</b>	Recombinant
<b>Host Species</b>	Rat
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PE/Cyanine7 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">ICFC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is 5 $\mu$ l per million cells in 100 $\mu$ l staining volume or 5 $\mu$ l per 100 $\mu$ l of whole blood.
<b>Excitation Laser</b>	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	Clone QA18A28 is compatible with Fixation buffer (Cat. No. 420801) and Intracellular Staining Permeabilization Wash Buffer (Cat. No. 421002) in both C57BL/6 splenocytes and human PBMC. QA18A28 is also compatible with True-Nuclear™ Transcription Factor Buffer Set (Cat. No. 424401).
<b>RRID</b>	AB_2801078 (BioLegend Cat. No. 396409) AB_2801079 (BioLegend Cat. No. 396410)

### Antigen Details

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<b>Structure</b>	32 kD serine protease
<b>Distribution</b>	Cytotoxic T cells, NK cells, and neutrophils, low on granulocytes, B cells and activated dendritic cells
<b>Function</b>	Granzyme B is able to induce target cell apoptosis by activating caspase independent pathways. Granzyme B is induced in CD8 <sup>+</sup> T lymphocytes with ConA/ IL-2 and CD4 <sup>+</sup> T lymphocytes with anti

CD3/CD28 or CD3/CD46.

<b>Interaction</b>	Caspase-3
<b>Ligand/Receptor</b>	Mannose-6-phosphate receptor
<b>Cell Type</b>	Neutrophils, T cells
<b>Biology Area</b>	Cell Biology, Immunology, Innate Immunity, Neuroscience
<b>Molecular Family</b>	Enzymes and Regulators, Proteases

**Antigen References**

1. Estebanez-Perpina E, *et al.* 2000. *Biol Chem.* 381:1203.
2. Griffiths GM. And S. Isaaz, *et al.* 1993. *J. Cell Biol.* 120:885.
3. Spaeny-Dekking EH, *et al.* 1998. *J. Immunol.* 160:3610.
4. Wagner C, *et al.* 2008. *Mol. Immunol.* 45:1761.

**Gene ID**

[3002](#)

[14939](#)

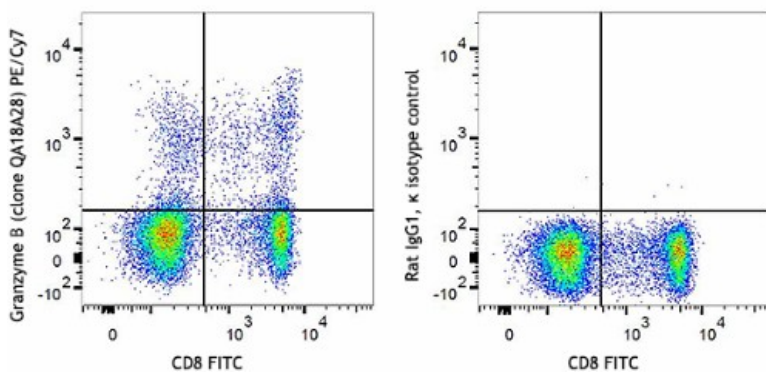
## Related Protocols

[Intracellular Flow Cytometry Staining Protocol](#)

## Other Formats

PE anti-human/mouse Granzyme B Recombinant Antibody, FITC anti-human/mouse Granzyme B Recombinant Antibody, APC anti-human/mouse Granzyme B Recombinant Antibody, PE/Cyanine7 anti-human/mouse Granzyme B Recombinant Antibody, Brilliant Violet 421™ anti-human/mouse Granzyme B Recombinant Antibody, PerCP/Cyanine5.5 anti-human/mouse Granzyme B Recombinant Antibody, Purified anti-human/mouse Granzyme B Recombinant Antibody, PerCP anti-human/mouse Granzyme B Recombinant Antibody, APC/Fire™ 750 anti-human/mouse Granzyme B Recombinant Antibody, Pacific Blue™ anti-human/mouse Granzyme B Recombinant Antibody, Alexa Fluor® 647 anti-human/mouse Granzyme B Recombinant Antibody, Alexa Fluor® 488 anti-human/mouse Granzyme B Recombinant Antibody, Alexa Fluor® 700 anti-human/mouse Granzyme B Recombinant Antibody, PE/Dazzle™ 594 anti-human/mouse Granzyme B Recombinant Antibody

## Product Data



Human peripheral blood mononuclear cells were stained with CD8-FITC, fixed and permeabilized, and then stained with Granzyme B (clone QA18A28) PE/Cyanine7 (left) or Rat IgG1, ? PE/Cyanine7 isotype control (right).

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