

Pacific Blue™ anti-human/mouse Granzyme B Antibody

Catalog# / Size	515407 / 25 tests 515408 / 100 tests
Clone	GB11
Regulatory Status	RUO
Other Names	Granzyme-2, serine protease B, CCP1, Asp-ase, CTLA-1
Isotype	Mouse IgG1, κ
Description	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

Verified Reactivity	Human, Mouse
Reported Reactivity	Rat
Antibody Type	Monoclonal
Host Species	Mouse
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with Pacific Blue™ under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	ICFC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. * Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

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Excitation Laser Violet Laser (405 nm)

Application References

(PubMed link indicates BioLegend citation)

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Product Citations

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RRID AB_2562195 (BioLegend Cat. No. 515407)
 AB_2562196 (BioLegend Cat. No. 515408)

Antigen Details

Structure	32 kD serine protease
Distribution	Cytotoxic T-cells and NK cells, low on granulocytes, B cells and activated dendritic cells
Function	Induction of cell death and apoptosis
Ligand/Receptor	Mannose-6-phosphate receptor
Cell Type	B cells, Dendritic cells, NK cells, T cells
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroscience
Molecular Family	Enzymes and Regulators, Proteases
Antigen References	<ol style="list-style-type: none"> 1. Estebanez-Perpina E, <i>et al.</i> 2000. <i>Biol Chem.</i> 381:1203 2. Griffiths GM. And S. Isaaz, <i>et al.</i> 1993. <i>J. Cell Biol.</i> 120:885 3. Spaeny-Dekking EH, <i>et al.</i> 1998. <i>J. Immunol.</i> 160:3610 4. Wagner C, <i>et al.</i> 2008. <i>Mol. Immunol.</i> 45:1761
Gene ID	3002 14939

Related Protocols

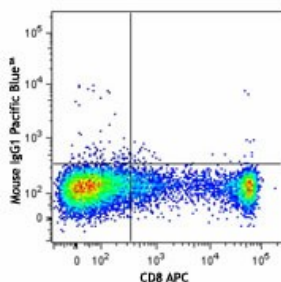
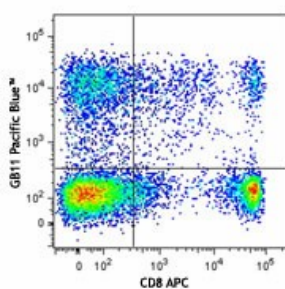
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

FITC anti-human/mouse Granzyme B, Alexa Fluor® 647 anti-human/mouse Granzyme B, Pacific Blue™ anti-human/mouse Granzyme B

Product Data



Human peripheral blood lymphocytes were surface stained with CD8 APC and then intracellularly stained with Granzyme B (clone GB11) Pacific Blue™ (top) or mouse IgG1 Pacific Blue™ isotype control (bottom).

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