

APC/Fire™ 750 anti-human/mouse Granzyme B Recombinant Antibody

Catalog# / Size	372209 / 25 tests 372210 / 100 tests
Clone	QA16A02
Regulatory Status	RUO
Other Names	Granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1, GZMB, CCP1, Asp-ase Granzyme 2, cytotoxic T-lymphocyte-associated serine esterase 1, GZMB, CCP1, Asp-ase
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
Antibody Type	Recombinant
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 APC/Fire™ 750 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. * APC/Fire™ 750 has a maximum excitation of 650 nm and a maximum emission of 787 nm.
Excitation Laser	Red Laser (633 nm)
Product Citations	<ol style="list-style-type: none">1. Gozgit JM, <i>et al.</i> 2021. Cancer Cell. :. PubMed2. Zhang X, <i>et al.</i> 2021. Mol Cancer Res. 19:1076. PubMed3. Georg P, <i>et al.</i> 2022. Cell. 185:493. PubMed
RRID	AB_2728376 (BioLegend Cat. No. 372209) AB_2728377 (BioLegend Cat. No. 372210)

Antigen Details

Structure	32 kD serine protease
Distribution	Cytotoxic T cells, NK cells, and neutrophils, low on granulocytes, B cells and activated dendritic cells
Function	Granzyme B is able to induce target cell apoptosis by activating caspase independent pathways.

Granzyme B is induced in CD8⁺ T lymphocytes with ConA/ IL-2 and CD4⁺ T lymphocytes with anti CD3/CD28 or CD3/CD46.

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

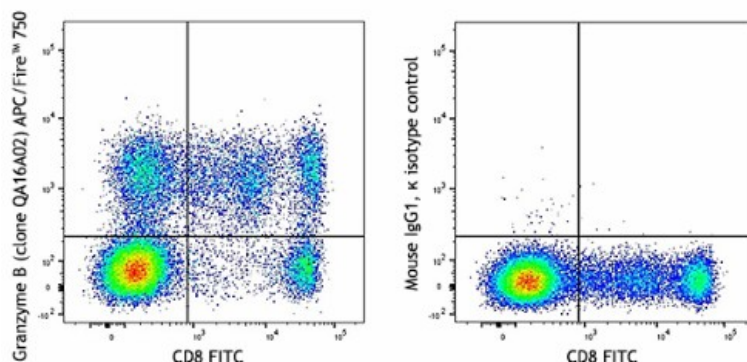
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

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

Product Data



Human peripheral blood mononuclear cells were stained with CD8 FITC, fixed, permeabilized, and then stained with Granzyme B (clone QA16A02, left) APC/Fire™ 750 or mouse IgG1, κ APC/Fire™ 750 isotype control (right).

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