

APC anti-mouse Perforin Antibody

Catalog# / Size	154303 / 25 µg 154304 / 100 µg
Clone	S16009A
Regulatory Status	RUO
Other Names	Prf1, Pfp, Pfn, Pfn-1
Isotype	Rat IgG2a, κ
Description	Perforin is a 70 kD cytolytic protein that is expressed in the cytoplasmic granules of cytotoxic T lymphocytes (CTLs) and natural killer (NK) cells. Perforin is one of the major effector molecules used by cytotoxic T cells and NK cells to mediate targeted cell lysis.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse perforin transfected cells.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions.
Concentration	0.2 mg/ml
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 ≤ 1.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Red Laser (633 nm)
Application Notes	Clone S16009A reacts with perforin from both C57BL/6 and BALB/c strains.
Product Citations	<ol style="list-style-type: none">1. Reyes RM, <i>et al.</i> 2021. Oncoimmunology. 10:2006529. PubMed2. Dolgova EV, <i>et al.</i> 2022. Int J Mol Sci. 23:.. PubMed3. Tsuchiya N, <i>et al.</i> 2020. Cell Reports. 29(1):162-175.e9.. PubMed4. Alsaleh G, <i>et al.</i> 2020. Elife. 9: . PubMed5. Ren Y, <i>et al.</i> 2022. J Immunother Cancer. 10:.. PubMed6. Zhang X, <i>et al.</i> 2021. Mol Cancer Res. 19:1076. PubMed7. Kim DK, <i>et al.</i> 2022. Nat Commun. 13:6292. PubMed8. Haque A, <i>et al.</i> 2020. Exp Neurol. 330:113315. PubMed9. Li D, <i>et al.</i> 2020. Immunohorizons. 0.661805556. PubMed10. Tao Z, <i>et al.</i> 2022. Cells. 11:.. PubMed11. Wang F, <i>et al.</i> 2021. Neoplasia. 23:281. PubMed
RRID	AB_2721462 (BioLegend Cat. No. 154303) AB_2721463 (BioLegend Cat. No. 154304)

Antigen Details

Structure	70 kD Protein that oligomerizes for pore formation.
Distribution	CTL, NK (Cytoplasmic Granules)
Function	Target cell lysis
Cell Type	NK cells, T cells
Biology Area	Immunology
Molecular Family	Cytokines/Chemokines
Antigen References	<ol style="list-style-type: none"> 1. Podack ER, <i>et al.</i> 1988. <i>Immunol. Rev.</i> 103:203. 2. Konjar S, <i>et al.</i> 2010. <i>Immunology.</i> 131:257. 3. Trapani JA, <i>et al.</i> 2002. <i>Nat. Rev. Immunol.</i> 2:735. 4. Osinska I, <i>et al.</i> 2014. <i>Cent. Eur. J. Immunol.</i> 39:109.

Gene ID [18646](#)

Related Protocols

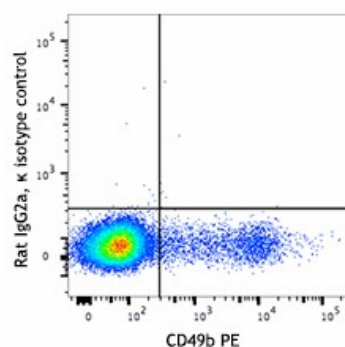
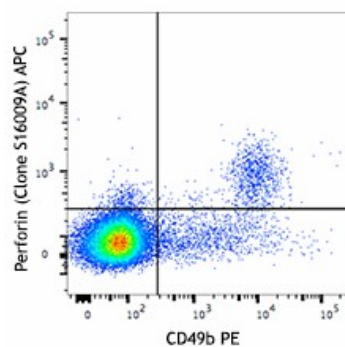
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry Staining Protocol](#)

Other Formats

APC anti-mouse Perforin, PE anti-mouse Perforin, Purified anti-mouse Perforin, FITC anti-mouse Perforin, PE/Dazzle™ 594 anti-mouse Perforin, APC/Fire™ 750 anti-mouse Perforin, Pacific Blue™ anti-mouse Perforin, Alexa Fluor® 647 anti-mouse Perforin

Product Data



C57BL/6 splenocytes were stained with CD49b PE. Cells were fixed, permeabilized, and stained with APC anti-mouse Perforin (clone S16009A, top) or APC rat IgG2a, κ isotype control (bottom).

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