

Alexa Fluor[®] 594 anti-human Perforin Antibody

Catalog# / Size	308124 / 100 µg
Clone	dG9
Regulatory Status	RUO
Other Names	PRF1, P1, PFP, HPLH2
Isotype	Mouse IgG2b, 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	Human
Reported Reactivity	Cow
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Purified granules from the human lymphoma cell line
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor [®] 594 under optimal conditions.
Concentration	0.5 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	ICC - Quality tested
Recommended Usage	<p>Each lot of this antibody is quality control tested by immunocytochemistry. For immunocytochemistry, a concentration range of 1.25 - 5.0 µg/mL is recommended. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>* Alexa Fluor[®] 594 has an excitation maximum of 590 nm, and a maximum emission of 617 nm.</p> <p>Alexa Fluor[®] and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p>
Excitation Laser	Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	<p>Clone dG9 primarily recognizes perforin associated with cytotoxic granules⁹. Additional reported applications (for the relevant formats) include: immunoprecipitation, intracellular flow cytometric analysis and immunofluorescence microscopy^{5,7}, and immunohistochemical staining of acetone-fixed frozen tissue sections and formalin-fixed paraffin-embedded tissue sections^{1,4}.</p> <p>Does not cross-react with mouse¹.</p>
Application References	<ol style="list-style-type: none">1. Hameed A, <i>et al.</i> 1992. <i>Am. J. Pathol.</i> 140:1025. (IHC)2. Schaeferli P, <i>et al.</i> 2004. <i>J. Exp. Med.</i> 199:1265.3. Watanabe N, <i>et al.</i> 1997. <i>Blood</i> 90:3662.4. Mauad T, <i>et al.</i> 2004. <i>Pediatr. Pulmonol.</i> 38:233. (IHC)5. Barrat FJ, <i>et al.</i> 1999. <i>P. Natl. Acad. Sci. USA</i> 96:8645. (IF)6. Chen H, <i>et al.</i> 2005. <i>J. Immunol.</i> 175:591.7. Bryceson YT, <i>et al.</i> 2007. <i>Blood</i> doi:10.1182/blood-2007-02-074468. (IF)8. Wood SM, <i>et al.</i> 2009. <i>Blood</i> 114:4117. PubMed

RRID AB_2566802 (BioLegend Cat. No. 308124)

Antigen Details

Structure	70 kD
Distribution	CTL, NK (cytoplasmic granules)
Function	Mediates targeted cell lysis
Cell Type	NK cells, T cells
Biology Area	Cell Biology, Immunology, Innate Immunity, Neuroscience
Molecular Family	Cytokines/Chemokines
Antigen References	1. Lieberman J. 2003. <i>Nat. Rev. Immunol.</i> 3:361. 2. Trapani J, et al. 2002. <i>Nat. Rev. Immunol.</i> 2:735.
Gene ID	5551

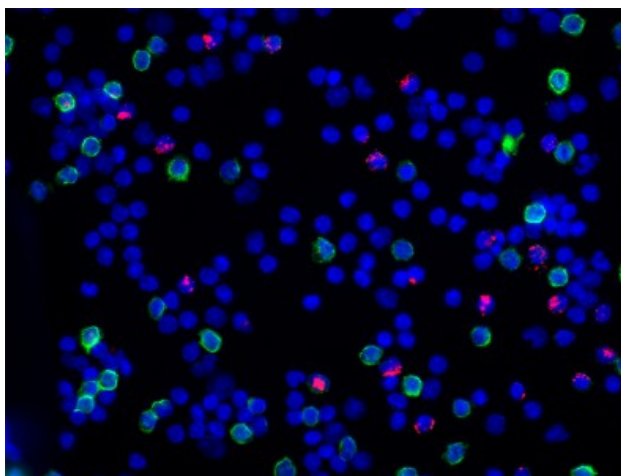
Related Protocols

[Immunocytochemistry Staining Protocol](#)

Other Formats

FITC anti-human Perforin, PE anti-human Perforin, Purified anti-human Perforin, Alexa Fluor® 488 anti-human Perforin, Alexa Fluor® 647 anti-human Perforin, APC anti-human Perforin, Pacific Blue™ anti-human Perforin, PerCP/Cyanine5.5 anti-human Perforin, Brilliant Violet 510™ anti-human Perforin, Brilliant Violet 421™ anti-human Perforin, Alexa Fluor® 594 anti-human Perforin, APC/Cyanine7 anti-human Perforin, PE/Cyanine7 anti-human Perforin, Brilliant Violet 711™ anti-human Perforin, PE/Dazzle™ 594 anti-human Perforin

Product Data



Human peripheral blood mononuclear cells were fixed with 2% paraformaldehyde (PFA) for ten minutes, permeabilized with 0.5% Triton X-100 for ten minutes, and blocked with 5% FBS for 30 minutes at room temperature. Then the cells were stained with 5 µg/ml Perforin (clone dG9) Alexa Fluor® 594 (red) and CD8 (clone HIT8a) Alexa Fluor® 488 (green) for one hour. The nuclei were counterstained with DAPI (blue). The image was captured with a 40X objective.

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BioLegend Inc., 8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587