

## Alexa Fluor<sup>®</sup> 594 anti-human Perforin Antibody

<b>Catalog# / Size</b>	308124 / 100 µg
<b>Clone</b>	dG9
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	PRF1, P1, PFP, HPLH2
<b>Isotype</b>	Mouse IgG2b, κ
<b>Description</b>	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

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<b>Verified Reactivity</b>	Human
<b>Reported Reactivity</b>	Cow
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Immunogen</b>	Purified granules from the human lymphoma cell line
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with Alexa Fluor <sup>®</sup> 594 under optimal conditions.
<b>Concentration</b>	0.5 mg/mL
<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="#">ICC - Quality tested</a>
<b>Recommended Usage</b>	<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<sup>®</sup> 594 has an excitation maximum of 590 nm, and a maximum emission of 617 nm.</p> <p>Alexa Fluor<sup>®</sup> and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p><a href="#">View full statement regarding label licenses</a></p>
<b>Excitation Laser</b>	Green Laser (532 nm)/Yellow-Green Laser (561 nm)
<b>Application Notes</b>	<p>Clone dG9 primarily recognizes perforin associated with cytotoxic granules<sup>9</sup>. Additional reported applications (for the relevant formats) include: immunoprecipitation, intracellular flow cytometric analysis and immunofluorescence microscopy<sup>5,7</sup>, and immunohistochemical staining of acetone-fixed frozen tissue sections and formalin-fixed paraffin-embedded tissue sections<sup>1,4</sup>.</p> <p>Does not cross-react with mouse<sup>1</sup>.</p>
<b>Application References</b>	<ol style="list-style-type: none"><li>1. Hameed A, <i>et al.</i> 1992. <i>Am. J. Pathol.</i> 140:1025. (IHC)</li><li>2. Schaeferli P, <i>et al.</i> 2004. <i>J. Exp. Med.</i> 199:1265.</li><li>3. Watanabe N, <i>et al.</i> 1997. <i>Blood</i> 90:3662.</li><li>4. Mauad T, <i>et al.</i> 2004. <i>Pediatr. Pulmonol.</i> 38:233. (IHC)</li><li>5. Barrat FJ, <i>et al.</i> 1999. <i>P. Natl. Acad. Sci. USA</i> 96:8645. (IF)</li><li>6. Chen H, <i>et al.</i> 2005. <i>J. Immunol.</i> 175:591.</li><li>7. Bryceson YT, <i>et al.</i> 2007. <i>Blood</i> doi:10.1182/blood-2007-02-074468. (IF)</li><li>8. Wood SM, <i>et al.</i> 2009. <i>Blood</i> 114:4117. <a href="#">PubMed</a></li></ol>

RRID AB\_2566802 (BioLegend Cat. No. 308124)

## Antigen Details

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

## Related Protocols

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[Immunocytochemistry Staining Protocol](#)

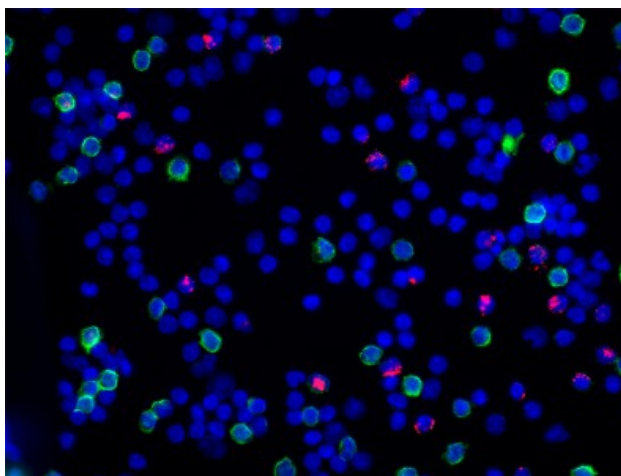
## Other Formats

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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

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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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