

## Purified anti-human Perforin Antibody

<b>Catalog# / Size</b>	308102 / 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.
<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.
<b>Application</b>	<a href="#">ICFC - Quality tested</a> <a href="#">IP, ICC, IHC - Reported in the literature, not verified in house</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">intracellular immunofluorescent staining with flow cytometric analysis</a> . For flow cytometric staining, the suggested use of this reagent is ≤ 0.06 µg per million cells in 100 µL volume. It is recommended that the reagent be titrated for optimal performance for each application.
<b>Application Notes</b>	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> .  Does not cross-react with mouse <sup>1</sup> .

### Application References

1. Hameed A, *et al.* 1992. *Am. J. Pathol.* 140:1025. (IHC)
2. Schaeferli P, *et al.* 2004. *J. Exp. Med.* 199:1265.
3. Watanabe N, *et al.* 1997. *Blood* 90:3662.
4. Mauad T, *et al.* 2004. *Pediatr. Pulmonol.* 38:233. (IHC)
5. Barrat FJ, *et al.* 1999. *P. Natl. Acad. Sci. USA* 96:8645. (IF)
6. Chen H, *et al.* 2005. *J. Immunol.* 175:591.
7. Bryceson YT, *et al.* 2007. *Blood* doi:10.1182/blood-2007-02-074468. (IF)
8. Wood SM, *et al.* 2009. *Blood* 114:4117. [PubMed](#)
9. Makedonas G, *et al.* 2010. *PLoS Pathog.* 6:e1000798.

### Product Citations

1. Trinks N, *et al.* 2021. *Commun Biol.* 4:1151. [PubMed](#)
2. Crespo AC, *et al.* 2020. *Cell.* 182(5):1125-1139. [PubMed](#)
3. Mann ER, *et al.* 2020. *Sci Immunol.* :5. [PubMed](#)
4. Dean JW, *et al.* 2020. *J Autoimmun.* 108:102417. [PubMed](#)
5. Del Alcazar D, *et al.* 2019. *Cell Rep.* 28:3047. [PubMed](#)

6. Mace E, Orange J 2014. *J Vis Exp.* 85: 51100. [PubMed](#)  
7. Wood S, *et al.* 2009. *Blood.* 114:4117. [PubMed](#)

RRID AB\_314700 (BioLegend Cat. No. 308102)

## 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, <i>et al.</i> 2002. <i>Nat. Rev. Immunol.</i> 2:735.
<b>Gene ID</b>	<a href="#">5551</a>

## Related Protocols

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

[Intracellular Flow Cytometry Staining Protocol](#)

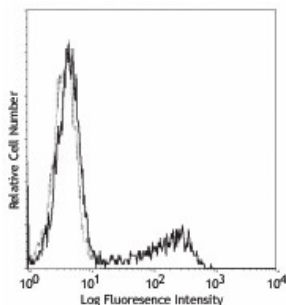
## Other Formats

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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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Whole blood lymphocytes stained intracellularly with dG9 FITC

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