

PE/Dazzle™ 594 anti-human Perforin Antibody

Catalog# / Size	308131 / 25 tests 308132 / 100 tests
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 and BSA (origin USA)
Preparation	The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 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 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. * PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application Notes	Clone dG9 primarily recognizes perforin associated with cytotoxic granules ⁹ . 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} . Does not cross-react with mouse ¹ .
Application References	1. Hameed A, <i>et al.</i> 1992. <i>Am. J. Pathol.</i> 140:1025. (IHC) 2. Schaerli 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 9. Makedonas G, <i>et al.</i> 2010. <i>PLoS Pathog.</i> 6:e1000798.
(PubMed link indicates BioLegend citation)	

Product Citations

1. Pathania AS, *et al.* 2022. *Mol Ther Oncolytics*. 25:308. [PubMed](#)
2. Shen Z, *et al.* 2022. *Immun Ageing*. 19:55. [PubMed](#)

RRID

AB_2687333 (BioLegend Cat. No. 308131)
AB_2687334 (BioLegend Cat. No. 308132)

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, <i>et al.</i> 2002. <i>Nat. Rev. Immunol.</i> 2:735.
Gene ID	5551

Related Protocols

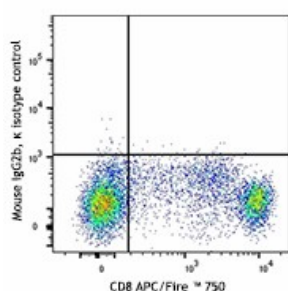
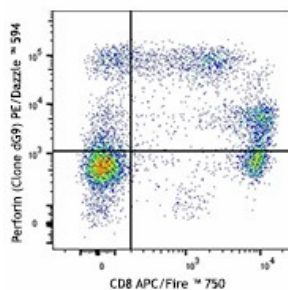
[Surface and Intracellular Cytokine Staining for Flow Cytometry - Video](#)

[Intracellular Flow Cytometry 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 lymphocytes were surface stained with CD8 APC/Fire™ 750, fixed with Fixation Buffer, permeabilized with Permeabilization Wash Buffer, and then intracellularly stained with perforin (clone dG9) PE/Dazzle™ 594 (top), or mouse IgG2b, κ PE/Dazzle™ 594 isotype control (bottom).

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

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