## **Product Data Sheet**

## PerCP/Cy5.5 anti-human Perforin

Catalog # / Size:	2140565 / 25 tests 2140570 / 100 tests
Clone:	dG9
Isotype:	Mouse lgG2b, κ
Immunogen:	Purified granules from the human lymphoma cell line
<b>Reactivity:</b>	Human
Preparation:	The antibody was purified by affinity chromatography, and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
<b>Concentration:</b>	Lot-specific

## **Applications:**

Applications:	Flow Cytometry
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 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.
	* PerCP/Cy5.5 has a maximum absorption of 482 nm and 564 nm and a maximun emission of 690 nm.
Application Notes:	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:	<ol> <li>Hameed A, <i>et al.</i> 1992. <i>Am. J. Pathol.</i> 140:1025. (IHC)</li> <li>Schaerli P, <i>et al.</i> 2004. <i>J. Exp. Med.</i> 199:1265.</li> <li>Watanabe N, <i>et al.</i> 1997. <i>Blood</i> 90:3662.</li> <li>Mauad T, <i>et al.</i> 2004. <i>Pediatr. Pulmonol.</i> 38:233. (IHC)</li> <li>Barrat FJ, <i>et al.</i> 1999. <i>P. Natl. Acad. Sci. USA</i> 96:8645. (IF)</li> <li>Chen H, <i>et al.</i> 2005. <i>J. Immunol.</i> 175:591.</li> <li>Bryceson YT, <i>et al.</i> 2007. <i>Blood</i> doi:10.1182/blood-2007-02-074468. (IF)</li> <li>Wood SM, <i>et al.</i> 2009. <i>Blood</i> 114:4117. <u>PubMed</u></li> <li>Makedonas G, <i>et al.</i> 2010. <i>PLoS Pathog.</i> 6:e1000798.</li> </ol>

**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

For research use only. Not for diagnostic use. Not for resale. Sony Biotechnology Inc. will not be held responsible for patent infringement or other violations that may occur with the use of our products. Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com the major effector molecules used by cytotoxic T cells and NK cells to mediate targeted cell lysis.

 Antigen
 1. Lieberman J. 2003. Nat. Rev. Immunol. 3:361.

 References:
 2. Trapani J, et al. 2002. Nat. Rev. Immunol. 2:735.