## **Product Data Sheet**

## **APC anti-human Perforin**

Catalog # / Size: 2140555 / 25 tests

2140560 / 100 tests

Clone: dG9

**Isotype:** Mouse IgG2b, κ

Immunogen: Purified granules from the human

lymphoma cell line

Reactivity: Human

**Preparation:** The antibody was purified by affinity

chromatography, and conjugated with APC under optimal conditions. The solution is free of unconjugated APC and

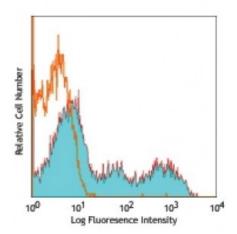
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood

lymphocytes intracellularly stained

with DG9 APC

## **Applications:**

**Applications:** Flow Cytometry

Recommended

**Usage:** 

Each lot of this antibody is quality control tested by intracellular

immunofluorescent staining with flow cytometric analysis. **Test size products** are transitioning from 20 microL to 5 microL per test. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. It is recommended that

the reagent be titrated for optimal performance for each application.

**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:

1. Hameed A, et al. 1992. Am. J. Pathol. 140:1025. (IHC)

2. Schaerli 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.

**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.

 Lieberman J. 2003. *Nat. Rev. Immunol.* 3:361.
Trapani J, *et al.* 2002. *Nat. Rev. Immunol.* 2:735. **Antigen** References: