TECHNICAL DATA SHEET

CyFlow™ Perforin Purified
Anti-Hu; Clone dG9

REF **BC361800**

For Research Use Only.

Not for use in diagnostic or therapeutic procedures.

Specifications

Antigen	Perforin
Alternative Names	—
Clone	dG9
Clonality	monoclonal
Format	Purified
Host / Isotype	Mouse / IgG2b
Species Reactivity	Human, Cow
Negative Species Reactivity	Mouse
Quantity [Concentration]	0.1 mg [1 mg/ml]
Immunogen	Purified granules from human YT lymphoma cell line

Specificity

The mouse monoclonal antibody dG9 (δG9) recognizes perforin, a 70 kDa protein expressed in cytoplasmic granules of cytotoxic T cells and NK cells.

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Application

Based on published sources, this antibody is suitable for the following applications:

- Flow cytometry
- Immunoprecipitation
- Immunohistochemistry
- Immunocytochemistry

Storage Buffer

The reagent is provided in Tris buffered saline (TBS) solution, pH ≈8.0, containing 0.1% (w/v) sodium azide.

Storage and Stability

Storage	Avoid prolonged exposure to light. Store in the dark at 2-8°C. Do not freeze.
Stability	Do not use after expiration date stamped on vial label.

Background Information

Perforin is a 70 kDa cytolytic protein with structural and functional similarities to complement component 9 (C9). It is stored in cytoplasmic granules of cytotoxic T cells and NK cells and after its release it forms transmembrane pores in the target cells to kill it. As perforin is a key effector molecule for cell-mediated cytolysis, defects of its gene can cause severe disorders.

References

- Hersperger AR1, Makedonas G, Betts MR: Flow cytometric detection of perforin upregulation in human CD8 T cells. Cytometry A. 2008 Nov; 73(11):1050-7. < PMID: 18615597 >
- Takeuchi M, Inoue T, Otani T, Yamasaki F, Nakamura S, Kibata M: Cell-in-cell structures formed between human cancer cell lines and the cytotoxic regulatory T-cell line HOZOT. J Mol Cell Biol. 2010 Jun; 2(3):139-51. < PMID: 20348186 >
- Vargas-Inchaustegui DA, Demberg T, Robert-Guroff M: A CD8α(-) subpopulation of macaque circulatory natural killer cells can mediate both antibody-dependent and antibody-independent cytotoxic activities. Immunology. 2011 Nov; 134(3):326-40. < PMID: 21978002 >
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tuberculosis (TB) exhibit polarized effector memory phenotypes and stronger anti-TB effector functions. PLoS Pathog. 2012; 8(11):e1002984. < PMID: 23144609 >

The Safety Data Sheet for this product is available at www.sysmex-partec.com/services.

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