30-2878: Anti-Perforin APC Mab (Clone:dG9)

Clonality :	Monoclonal
Clone Name :	dG9
Application :	FACS
Reactivity :	Human,Bovine
Conjugate :	APC
Gene :	PRF1
Gene ID :	5551
Uniprot ID :	P14222
Alternative Name :	PRF1, P1, PFP, HPLH2
Isotype :	Mouse IgG2b kappa
Immunogen Information :	purified granules from human YT lymphoma cell line

Description

Specificity: The mouse monoclonal antibody dG9 (also known as deltaG9) recognizes perforin, a 70 kDa protein expressed in cytoplasmic granules of cytotoxic T cells and NK cells.

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.

Product Info

Amount :	100 tests
Purification :	Purified antibody is conjugated with activated allophycocyanin (APC) under optimum conditions and unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.
Content :	Formulation : Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Storage condition :	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Application Note

Flow cytometry: The reagent is designed for analysis of human blood cells using 10 µl reagent / 100 µl of whole blood or 10^6 cells in a suspension. The content of a vial (1 ml) is sufficient for 100 tests. Intracellular staining.
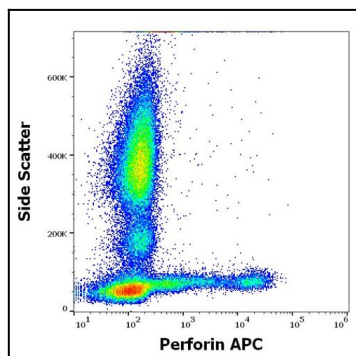
Figure 1: Flow cytometry intracellular staining pattern of human peripheral whole blood stained using anti-Perforin (dG9) APC antibody (10 μl reagent / 100 μl of peripheral whole blood).
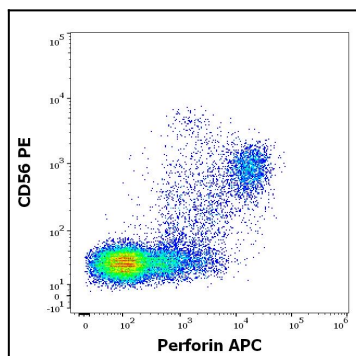

Figure 2: Flow cytometry multicolor surface staining pattern of human lymphocytes using anti-human CD56 (LT56) PE antibody (10 μl reagent / 100 μl of peripheral whole blood) and intracellular staining using anti-Perforin (dG9) APC antibody (10 μl reagent / 100 μl of peripheral whole blood).
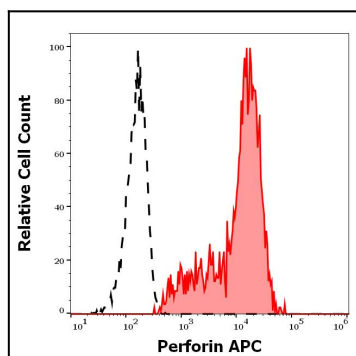

Figure 3: Separation of human Perforin positive CD56 positive lymphocytes (red-filled) from neutrophil granulocytes (black-dashed) in flow cytometry analysis (intracellular staining) of human peripheral whole blood stained using anti-Perforin (dG9) APC antibody (10 μl reagent / 100 μl of peripheral whole blood).