

**PERFORMANCE DATA SHEET**

2520

**Monoclonal anti-human Perforin\***

**mAb name/Clone:** delta G9

**Isotype:** Mouse IgG2b

**Immunogen:** Purified granules from human YT lymphoma cell line

**CATALOG#:** 358-020

**QUANTITY:** 100 µg

**CONCENTRATION:** 1.0 mg/ml

**INFORMATION:** Human perforin (cytolysin) is believed to be one of the major effector molecules used by cytotoxic T cells and NK cells to mediate targeted cell lysis. Perforin expression is constitutive on NK cells, but increases in resting CD8<sup>+</sup> cytotoxic cells upon activation. Antibody delta G9 recognizes the human perforin molecule of 70 kd.

**References:** M.J. Smyth, et al, (1990) J Exp Med **171**: 1269-1281. A. Hameed, et al, Am J Pathol (1992) **140**: 1025-1030. P.L. Jose, et al, (1994) J Immunol **148**: 3354-3360. B.C. Schlessinger & L. Cheng, Immunol (1994) **81**: 291-295. C.C. Liu, et al, (1995) Immunol Today **16**: 194-201. A.H. Hombach, H Abken, et al. (2006) J Immunol **177**: 5668-5675.

**STORAGE CONDITIONS:** Store at 2 - 5°C. Freeze/Thawing is not recommended.

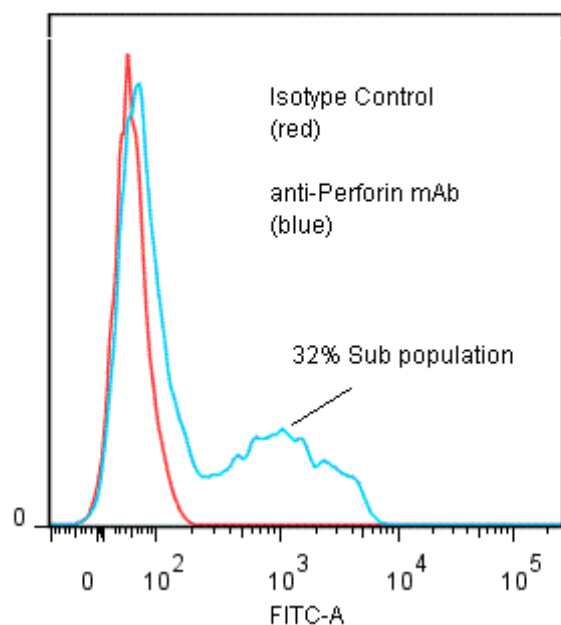
**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: \_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 0.5 mg/ml Gentamicin Sulfate (as a preservative).

**PRODUCTION:** Antibody was Protein A purified from (low FBS containing) tissue culture supernatant. Purity was >95% Immunoglobulin by SDS-PAGE with less than 1% Bovine Immunoglobulin.

**PERFORMANCE:** Ficoll prepared human **peripheral blood mononuclear cells** were stimulated by incubating 2 days at 5 x 10<sup>6</sup> cells/ml in RPMI 10% FBS media including 5 µg/ml **Phytohemagglutinin-P**. Cells were then fixed for 30 minutes with 2% buffered formaldehyde after which they were washed two times. Subsequent reagent incubations and washes were done using a buffer containing **0.3% Saponin** to permeabilize cells. Five x 10<sup>5</sup> cells per tube were washed and incubated 45 minutes on ice with 80 µl of anti-perforin antibody at **1 µg/ml**. They were then washed twice and incubated with 2<sup>o</sup> reagent Goat anti-Mouse IgG/FITC (Catalog #232-011), after which they were washed three times, fixed and analyzed by FACS using a PBMC gate. A net **32%** sub population of the cells stained positive with a mean shift of **1.51 log<sub>10</sub>** fluorescent units when compared to a Mouse IgG2b negative control (Catalog #284-020).

**Binding of anti-Perforin mAb +GAM/FITC to fixed, permeabilized human PBMC**



\* **Research Use Only. Not for use in Diagnostic procedures.**