## **Product Data Sheet**

## **APC anti-human IL-9**

Catalog # / 3138065 / 25 tests

**Size:** 3138070 / 100 tests

Clone: MH9A4

**Isotype:** Mouse IgG2b, κ

Immunogen: Baculovirus-expressed, recombinant

human IL-9

Reactivity: Human

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

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

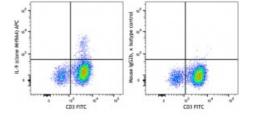
and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

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

Concentration: Lot-specific



PMA and ionomycin-stimulated (6 hours, in the presence of monensin) Th2-polarized human lymphocytes were surface stained with CD3 FITC. Cells were fixed, permeabilized and intracellularly stained with IL-9 (clone MH9A4) APC (left), or mouse IgG2b, κ APC isotype control (right).

## **Applications:**

**Applications:** Intracellular Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by intracellular flow cytometry using our True-Phos  $^{\text{\tiny M}}$  Perm Buffer in Cell Suspensions Protocol. For flow cytometric staining, the suggested use of this reagent is 5  $\mu l$  per million cells in 100  $\mu l$  staining volume or 5  $\mu l$  per 100  $\mu l$  of whole blood.

Application Notes:

**ELISA Capture<sup>2</sup>:** The purified MH9A4 antibody is useful as the capture antibody in a human IL-9 sandwich ELISA assay, when used in conjunction with the biotinylated MH9D1 antibody as the detecting antibody.

Application References:

- 1. Jenmalm M, et al. 2001. Clin. Exptl. Aller. 31:1528.
- 2. Faulkner H, et al. 2002. J. Infec. Diseas. 185:665.
- 3. Chen J, et al. 2008. Blood 111:5163. PubMed
- 4. Chang HC, et al. 2010. Nat. Immunol. 11:527. (ELISA) PubMed
- 5. Lozano E, et al. 2012. J Immunol. 188:3869. PubMed.

**Description:** 

IL-9 is a potent, T cell-derived, T cell growth factor which can also enhance mast cell activity and IL-3- or IL-4- dependent proliferation of bone marrow-derived mast cells. IL-9 synergizes with erythropoietin to promote erythroid colony formation. IL-9 has also been reported to protect human T cells from apoptosis induced by IL-2 withdrawal. IL-9 is upregulated in human eosinophils by TNF- $\alpha$  and IL1- $\beta$ . IL-9 has been reported to downregulate the oxidative burst in activated human alveolar macropahges and induce TGF- $\beta$  production. The MH9A4 antibody reacts with human IL-9. The MH9A4 antibody can neutralize the bioactivity of natural or recombinant IL-9.

## **Antigen** References:

- 1. Fitzgerald K, et al. Eds. 2001. The Cytokine FactsBook. Academic Press San Diego.
- Quesniaux V. 1992. Research Immunology 143:385.
  Renauld J, et al. 1993. Adv. Immunol. 54:79.
  Yang Y. 1992. Leuk. Lymphoma 8:441.