

## Alexa Fluor® 647 anti-human IL-9

**Catalog # / Size:** 507607 / 25 tests  
507608 / 100 tests

**Clone:** MH9A4

**Isotype:** Mouse IgG2b,  $\kappa$

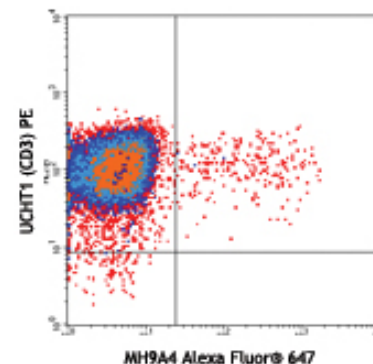
**Immunogen:** Baculovirus-expressed, recombinant human IL-9

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 647 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 647.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



*PMA/ionomycin-stimulated TH2 polarized lymphocytes intracellularly stained with anti-CD3 (UCHT1) PE and MH9A4 Alexa Fluor® 647*

## Applications:

**Applications:** ICFC - *Quality tested*

**Recommended Usage:** Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is 5  $\mu$ l per 10<sup>6</sup> cells in 100  $\mu$ l volume. It is recommended that the reagent be titrated for optimal performance for each application.

\* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633nm / 635nm.

\*\* Alexa Fluor® is a registered trademark of Molecular Probes, Inc. Alexa Fluor® dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**Application Notes:** 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.

**Flow Cytometry:** The fluorochrome-labeled MH9D1 antibody is useful for intercellular immunofluorescent staining and flow cytometric analysis to identify human IL-9-producing cells in mixed cell populations. For intracellular cytokine staining protocol, please visit [www.biolegend.com](http://www.biolegend.com) and click on the support section.

For human IL-9 neutralization assay, the LEAF™ purified MH9D1 antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m filtered) is recommended for neutralization of human IL-9 bioactivity.

**Application References:**

1. Jenmalm M, *et al.* 2001. *Clin. Exptl. Aller.* 31:1528.
2. Faulkner H, *et al.* 2002. *J. Infec. Diseases.* 185:665.
3. Chen J, *et al.* 2008. *Blood* 111:5163. PubMed
4. Chang HC, *et al.* 2010. *Nat. Immunol.* 11:527. (ELISA) 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 macrophages 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.
2. Quesniaux V. 1992. *Research Immunology* 143:385.
3. Renauld J, *et al.* 1993. *Adv. Immunol.* 54:79.
4. Yang Y. 1992. *Leuk. Lymphoma* 8:441.

### Related Products:

**Product**  
Alexa Fluor® 647 Mouse IgG2b,  $\kappa$  Isotype Ctrl  
Cell Staining Buffer  
RBC Lysis Buffer (10X)

**Clone**  
MPC-11

**Application**  
FC, ICFC  
FC, ICC, ICFC  
FC, ICFC



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