

## Purified Anti-Human IL-9 Antibody[MH9A4]

catalog number: AN007820P

**Note:** Centrifuge before opening to ensure complete recovery of vial contents.

### Description

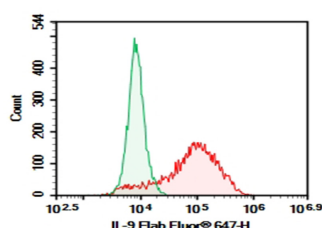
|                     |                                          |
|---------------------|------------------------------------------|
| <b>Reactivity</b>   | Human                                    |
| <b>Immunogen</b>    | Recombinant Human IL-9 protein           |
| <b>Host</b>         | Mouse                                    |
| <b>Isotype</b>      | Mouse IgG2b, $\kappa$                    |
| <b>Clone</b>        | MH9A4                                    |
| <b>Purification</b> | >98%, Protein A/G purified               |
| <b>Conjugation</b>  | Unconjugated                             |
| <b>Buffer</b>       | PBS, pH 7.2. Contains 0.05% proclin 300. |

### Applications

### Recommended Dilution

|            |                                                          |
|------------|----------------------------------------------------------|
| <b>FCM</b> | 2 $\mu$ g/mL( $0.5 \times 10^6$ - $1 \times 10^6$ cells) |
|------------|----------------------------------------------------------|

### Data



HEK293T cells transfected with pcDNA3.1 plasmid encoding Human IL-9 gene were stained with 0.2  $\mu$ g Purified Anti-Human IL-9 Antibody[MH9A4] (Right) and 0.2  $\mu$ g Mouse IgG2b,  $\kappa$  Isotype Control (Left), followed by Elab Fluor® 647-conjugated Goat Anti-Mouse IgG Secondary Antibody.

### Preparation & Storage

|                 |                                                                                                    |
|-----------------|----------------------------------------------------------------------------------------------------|
| <b>Storage</b>  | Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles. |
| <b>Shipping</b> | Ice bag                                                                                            |

### Background

IL-9 is a 14 kDa cytokine originally named P40 and identified by its proliferative effects on T cell populations. The receptor, which is a heterodimer of the gamma chain portion of the IL-2 receptor and the IL-9R chain, activates Jak/STAT signaling pathways upon binding its ligand. Since the discovery of IL-9, numerous other functions have been observed. It induces Th17 and Treg differentiation in CD4<sup>+</sup> T cells, IgE production in B cells, and the differentiation and proliferation of mast cells. IL-9 expression was initially observed in Th2 cells, but has since been found in Th17, eosinophil, and mast cells. Th9 cells, a newly discovered subset of CD4<sup>+</sup> T cells, are characterized by the secretion of large amounts of IL-9 and IL-10. Th9 development is induced by stimulation of undifferentiated CD4<sup>+</sup> with IL-4 and TGF beta. Th2 cells can also be driven towards a Th9 phenotype in the presence of TGF beta.