

## AF/LE Purified Anti-Human IL-9 Antibody[MH9A4]

catalog number: AN007820

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

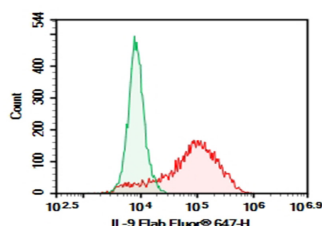
### Description

<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>	None (AF/LE)
<b>Buffer</b>	Sterile PBS, pH 7.2. < 1.0 EU per mg of the antibody as determined by the LAL method.

### Applications Recommended Dilution

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



HEK293T cells transfected with pcDNA3.1 plasmid encoding Human IL-9 gene were stained with 0.2  $\mu$ g AF/LE 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. This preparation contains no preservatives, thus it should be handled under aseptic conditions.
<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.