

Purified Anti-Human IL-9 Antibody[MH9A4]

catalog number: AN007820P

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

Description

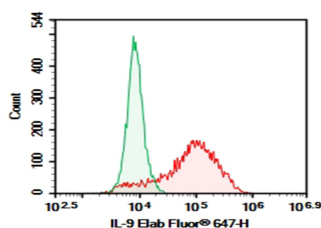
Reactivity	Human
Immunogen	Recombinant Human IL-9 protein
Host	Mouse
Isotype	Mouse IgG2b, κ
Clone	MH9A4
Purification	>98%, Protein A/G purified
Buffer	Phosphate-buffered solution, pH 7.2, containing 0.05% non-protein stabilizer. Dialyze to completely remove the stabilizer prior to labeling.

Applications

Recommended Dilution

FCM	$\leq 0.2 \mu\text{g}$ per million cells in 100 μL volume
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Data



HEK293T cells transfected with pcDNA3.1 plasmid encoding Human IL-9 gene were stained with 0.2 μg Purified Anti-Human IL-9 Antibody[MH9A4] (Right) and 0.2 μg Mouse IgG2b, κ Isotype Control (Left), followed by

Elab Fluor® 647-conjugated Goat Anti-Mouse IgG Secondary Antibody.

Preparation & Storage

Storage	Store at 4°C valid for 12 months or -20°C valid for long term storage, avoid freeze / thaw cycles.
Shipping	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⁺ 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⁺ 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⁺ with IL-4 and TGF beta. Th2 cells can also be driven towards a Th9 phenotype in the presence of TGF beta.

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