

## Recombinant Human IL-9 (His, Strep)

## Information X 3 0



Gene ID	3578
Accession #	P15248
Alternate Names	Human IL9; IL9; IL-9; interleukin 9; Cytokine P40; HP40
Source	HEK293
Protein sequence	QGCPTLAGILDINFLINKMQEDPASKCHCSANVTSCLCLGIPSDNCTRPCFSERLSQMTNTTMQTRYPLIFS RVKKSVEVLKNNKCPYFSCEQPCNQTTAGNALTFLKSLLEIFQKEKMRGMRGKI
Tag	C-His, C-Strep
M.Wt	The protein has a calculated MW of 14.1 KDa.
Appearance	Solution protein.
Stability & Storage	Avoid repeated freeze-thaw cycles. It is recommended that the protein be aliquoted for optimal storage2 years from date of receipt, -20 to -70 °C as supplied.
Concentration	1 mg/mL
Formulation	Supplied as a 0.2 µm filtered solution in PBS, pH7.4.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. This solution can be diluted into other aqueous buffers.
<b>Biological Activity</b>	Fully biologically active as determined by a cell proliferation assay using MO7e human megakaryocytic leukemic cells. The EC50 for this effect is 0.95 ng/mL.
Shipping Condition	Shipping with dry ice.
Handling	Centrifuge the vial prior to opening.
Usage	For Research Use Only! Not to be used in humans.

## Quality Control

Purity	> 95 % by SDS-PAGE.
Endotoxin	Less than 1.0 EU/µg as determined by LAL method.

## Description

Interleukin-9 (IL-9) is encoded by the IL9 gene and is produced by T cells, specifically CD4+ helper cells. IL-9 was initially identified as a cytokine found in conditioned media for human T-cell leukemia virus type I (HTLVI)transformed T cell lines. It functions through the IL-9 receptor, which activates different signal transducer and activator (STAT) proteins, linking this cytokine to various biological processes. IL-9 can support the growth of IL-2-independent and IL-4-independent helper T cells. Human IL-9 shares approximately 56% amino acid sequence identity with mouse IL-9. The gene encoding this cytokine has been identified as a candidate gene for asthma. Genetic studies in mouse models of asthma have shown that this cytokine is a determinant of bronchial hyperresponsive pathogenesis.













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