

## Recombinant Human IL9

Cat No:HR2R1636

For research use only

### Overview

Quantity	1.0 ?g
Gene Symbol	IL9
Gene ID	3578
Accession	P15248
Alternative Name	Cytokine P40, T-cell growth factor P40
Species	Human
Source	E. coli
Description	<p>Interleukin 9 (IL9) is an immunoregulatory cytokine belonging to the IL-7/IL-9 cytokine family. Commonly produced by TH17 cells, IL9 acts as a hematopoietic cell regulator by preventing apoptosis and stimulates cell proliferation of T lymphocytes, erythroid cells, and mast cells. It binds to the IL9 receptor (IL9R) to activate different signal transducer and activator (STAT) proteins. It also supports IL2 and IL4 independent growth of helper T-cells and affects TH17 and Tregs through STAT3 and STAT5 signalling activation. Furthermore, IL9 has been found to be a candidate gene for asthma as its presence determines the pathogenesis of bronchial hyper-responsiveness. Although human and mouse IL9 share a 56% amino acid identity, human IL9 is not active on mouse cells and can be found to inhibit melanoma growth in mice.</p>
Functions	The ED50 is 0.1-0.6 ng/mL as determined by a cell proliferation assay
Formulation	Lyophilized from a 0.2 ?m filtered solution in PBS (with BSA as a carrier protein)
Solubility	Reconstitute in sterile PBS at 100?g/mL (containing at least 0.1% human or bovine serum albumin)
Appearance	Lyophilized Powder
Molecular Weight	N/A
Purity	>95% as determined by SDS-PAGE
Concentration	<1.0 EU/?g of recombinant protein as determined by the LAL method
Shipping Condition	Ambient Temperature
Storage Condition	The lyophilized protein is stable for at least one year from date of receipt at -70?C. Upon reconstitution, this cytokine can be stored in working aliquots at 2? - 8?C for one month, or at -20?C for six months, with a carrier protein without detectable loss of activity. Avoid repeated freeze/thaw cycles.