

Catalog # Aliquot Size

1869-40N-10 10 μg 1869-40N-1000 1 mg

Recombinant Human IL9

Recombinant human protein expressed in E. coli cells

Catalog # 1869-40N

Lot # G3211-82

Product Description

Recombinant Human IL9 was expressed in E. coli cells. The protein accession number is $\frac{P15248}{P15248}$

Gene Aliases

P40, T-cell growth factor P40

Endotoxin Level

<1.0 EU/ μg of recombinant protein as determined by the LAL method

Formulation

The ED50 is 0.1-0.6 ng/mL as determined by a cell proliferation assay

Reconstitution Protocol

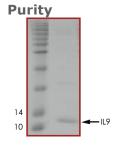
Lyophilized from a 0.2 µm filtered solution in PBS

Storage and Stability

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.

Scientific Background

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.



Recombinant Human IL9 resolved on a 15% SDS-PAGE gel under reducing conditions and stained with Coomassie Brilliant Blue G-250

Approx. MW 14.4 kDa

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Catalog Number Specific Lot Number

Purity Stability

Storage & Shipping

1869-40N G3211-82

95%

6 mos. at -20°C from date of shipment

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