

## GFH82

## Recombinant Human IL-9

### Description

Interleukin-9 (IL-9) is a cytokine produced by type 2 T helper (Th2) cells and regulates hematopoietic cells. IL-9 signals through the interleukin-9 receptor (IL9R) to activate STAT signaling. IL-9 functions to induce cell proliferation, prevent cell apoptosis, and is associated with asthma and airway hyperresponsiveness.

<b>Length</b>	127 aa
<b>Molecular Weight</b>	14.3 kDa
<b>Source</b>	E. coli
<b>Accession Number</b>	P15248
<b>Purity</b>	≥95% determined by reducing and non-reducing SDS-PAGE

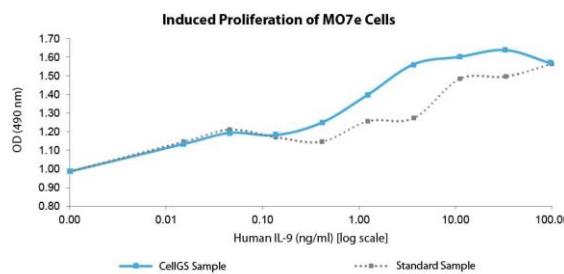
### Specifications

<b>Alternative Names</b>	Interleukin-9, interleukin 9, IL9, IL 9
<b>Biological Activity</b>	Human IL-9 is fully biologically active when compared to standard. The activity is determined by the ability to induce MO7e cells proliferation and it is typically less than 2 ng/ml. This corresponds to an expected specific activity of $5 \times 10^5$ units/mg.
<b>Endotoxin Level</b>	≤1.00 EU/μg as measured by kinetic LAL
<b>Formulation</b>	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
<b>AA Sequence</b>	MQGCPTLAGI LDINFLINKM QEDPASKCHC SANVTSCCLL GIPSDNCTRP CFSERLSQMT NTTMQTRYPL IFSRVKKSVL VLKNNKCPYF SCEQPCNQTT AGNALTFLKS LLEIFQKEKM RGMRGKI

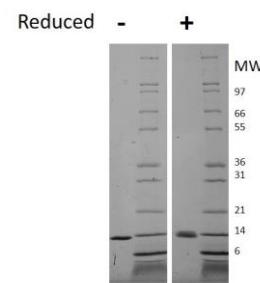
### Preparation and Storage

<b>Reconstitution</b>	Centrifuge vial before opening. When reconstituting the product, gently pipet and wash down the sides of the vial to ensure full recovery of the protein into solution. It is recommended to reconstitute the lyophilized product with sterile 10 mM HCl at 0.1 mg/ml, which can be further diluted into other aqueous solutions.
<b>Stability and Storage</b>	12 months from date of receipt when stored at -20°C to -80°C as supplied. 1 month when stored at 4°C after reconstituting as directed. 3 months when stored at -20°C to -80°C after reconstituting as directed.

### Data



Induced proliferation of MO7e cells for Human IL-9. Cell proliferation was measured to calculate the ED50, which is as expected less than 5 ng/ml.



Non-reducing (-) and reducing (+) conditions in a 4 - 20% Tris-Glycine gel stained with Coomassie Blue. 1 μg of protein was loaded in each lane. Human IL-9 has a predicted Mw of 14.3 kDa.