

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.

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

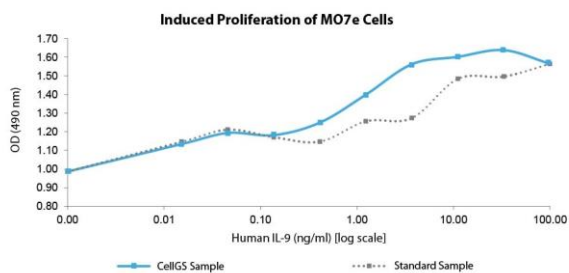
Specifications

Alternative Names	Interleukin-9, interleukin 9, IL9, IL 9
Biological Activity	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 5×10^5 units/mg.
Endotoxin Level	≤1.00 EU/μg as measured by kinetic LAL
Formulation	Lyophilized from a sterile (0.2 micron) filtered aqueous solution containing 0.1% Trifluoroacetic Acid (TFA)
AA Sequence	MQGCPTLAGI LDINFLINKM QEDPASKCHC SANVTSCCLCL GIPSDNCTRP CFSERLSQMT NTTMQTRYPL IFSRVKKSVE VLKNNKCPYF SCEQPCNQTT AGNALTFLKS LLEIFQKEKM RGMRGKI

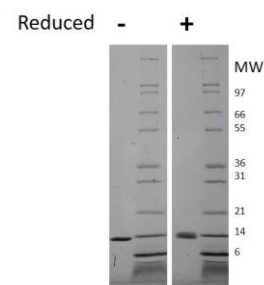
Preparation and Storage

Reconstitution	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.
Stability and Storage	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.