

# Human IL-9 Protein

Cat. No. IL9-HM101

## Description

<b>Source</b>	Recombinant Human IL-9 Protein is expressed from HEK293 with His tag at the C-Terminus. It contains Gln19-Ile144.
<b>Accession</b>	P15248
<b>Molecular Weight</b>	The protein has a predicted MW of 15.3 kDa. Due to glycosylation, the protein migrates to 40-50 kDa based on Tris-Bis PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

## Formulation and Storage

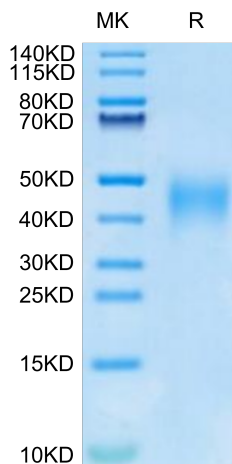
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in 20mM Tris, 150mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

IL-9 is a pleiotropic cytokine that influences various distinct functions of different target cells such as T cells, B cells, mast cells and airway epithelial cells by activating STAT1, STAT3 and STAT5. Because of its pleiotropic functions, IL-9 has been demonstrated to be involved in several diseases, such as cancer, autoimmunity and other pathogen-mediated immune-regulated diseases. In this review, we focus on the role of Th9 and IL-9-producing cells in allergic asthma.

## Assay Data

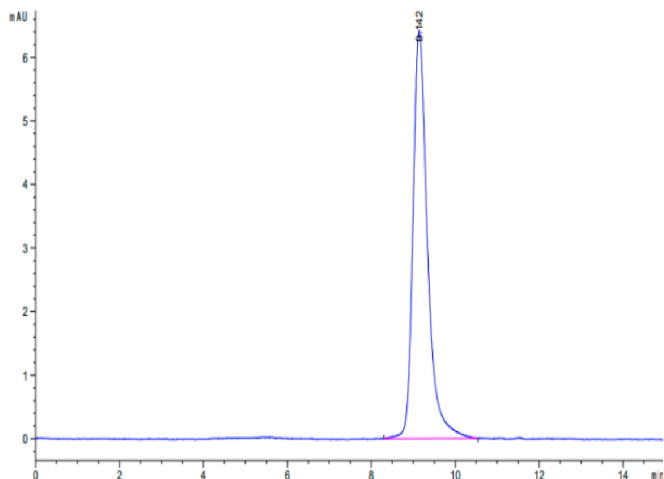
### Tris-Bis PAGE



Human IL-9 on Tris-Bis PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

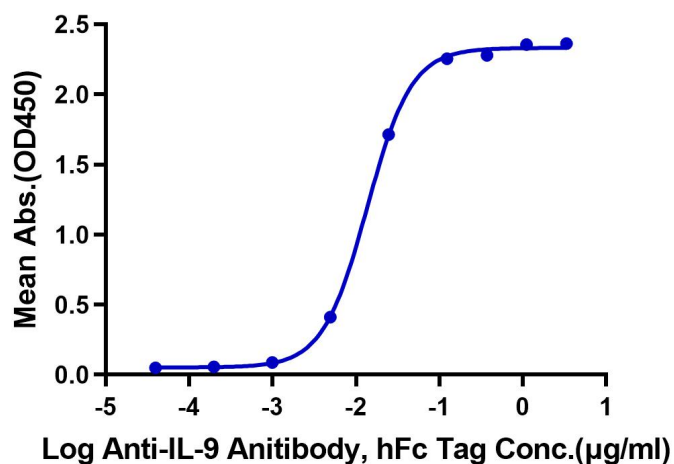
Assay Data



The purity of Human IL-9 is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Human IL-9, His Tag ELISA**  
0.02 $\mu$ g Human IL-9, His Tag Per Well



Immobilized Human IL-9, His Tag at 0.2 $\mu$ g/ml (100 $\mu$ l/Well) on the plate. Dose response curve for Anti-IL-9 Antibody, hFc Tag with the EC50 of 13.6ng/ml determined by ELISA.