

Human IL-9 Protein

Cat. No. IL9-HM101

Description

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

Formulation and Storage

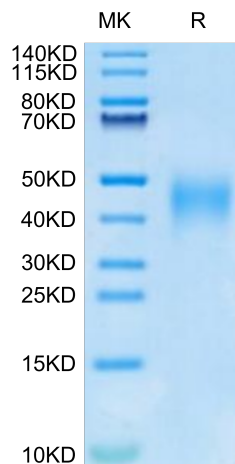
Formulation	Lyophilized from 0.22µm filtered solution in 20mM Tris, 150mM NaCl (pH 7.5). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months 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

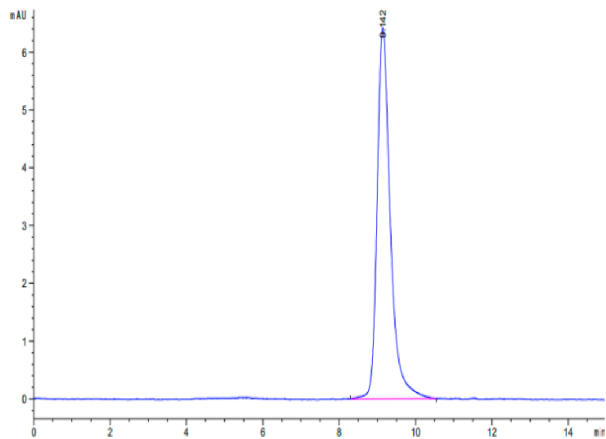
Bis-Tris PAGE



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

SEC-HPLC

Assay Data



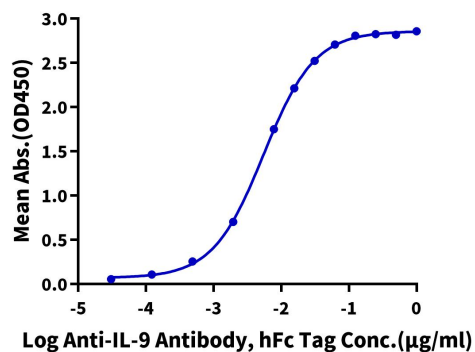
The purity of Human IL-9 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human IL-9, His Tag ELISA

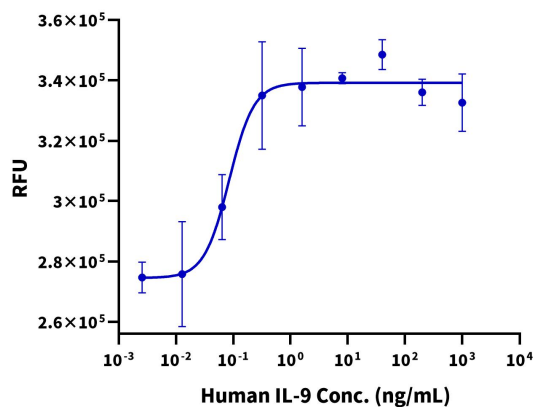
0.05µg Human IL-9, His Tag Per Well



Immobilized Human IL-9, His Tag at 0.5µg/ml (100µl/Well) on the plate. Dose response curve for Anti-IL-9 Antibody, hFc Tag with the EC50 of 5.5ng/ml determined by ELISA (QC Test).

Cell Based Assay

Recombinant Human IL-9 Bioactivity



Measured in a cell proliferation assay using MO7e human megakaryocytic leukemic cells. The ED50 for this effect is < 0.3 ng/mL (QC Test).