

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

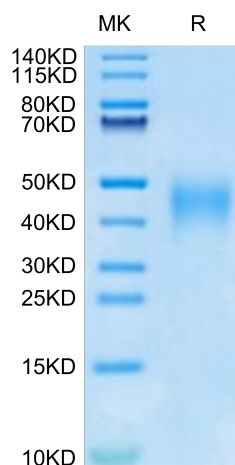
Formulation	Supplied as 0.22µm filtered solution in 20mM Tris, 150mM NaCl (pH 7.5).
Storage	Valid for 12 months from date of receipt when stored at -80°C. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

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.

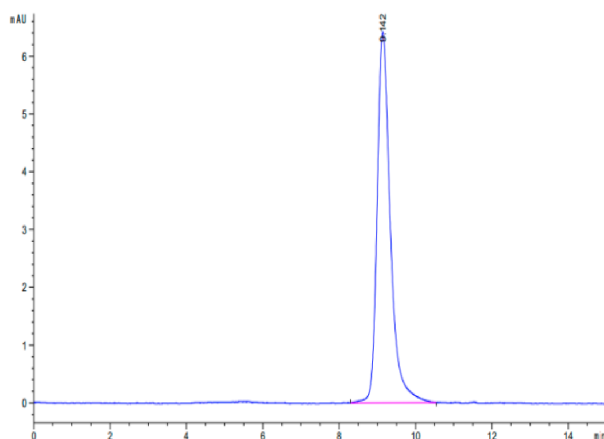
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



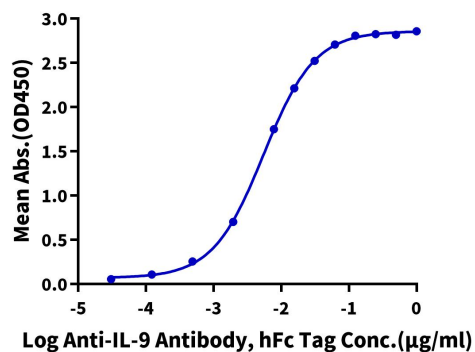
The purity of Human IL-9 is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

Human IL-9, His Tag ELISA

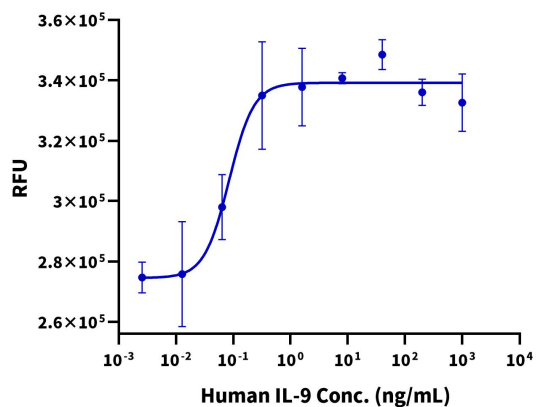
0.05µg Human IL-9, His Tag Per Well



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).