

Active Recombinant Mouse Interleukin 9

Cat. No. II9-477M **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Mouse IL-9 produced in E.Coli is a non-glycosylated, single polypeptide chain containing 127 amino acids and having a molecular mass of 14,298 Daltons.
Species	Mouse
Source	E.coli
Description	Interleukin (IL)-9 is known to regulate many cell types involved in T-helper type 2 responses classically associated with asthma, including B- and T-lymphocytes, mast cells, eosinophils and epithelial cells. Growing evidence obtained from human genomic analysis and antigen-challenged transgenic mice suggests that interleukin-9 (IL-9) is a candidate factor in immunoglobulin E (IgE) production and thus is thought to be associated with bronchial inflammation and bronchial hyperresponsiveness (BHR).
Form	Lyophilized from 10mM Sodium Phosphate, pH 7.5
Purity	Purity Greater than 96% as determined by: Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.
Bio-activity	Recombinant mouse IL-9 is fully bioactive when compared to a standard. Mouse IL-9 induces a dose-dependent proliferation of mouse Mo7e cells with an ED50 of 0.382 ng/ml.
Physical Appearance	Sterile Filtered white lyophilized (freeze-dried) powder.

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Solubility	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 water at a concentration of 0.1 mg/ml, which can be further diluted into other aqueous solutions.
Purity Greater than 96% as determined by	Analysis by RP-HPLC. Reducing and non-reducing SDS-PAGE.
Protein Content determined by	UV spectroscopy at 280 nm. Analysis by RP-HPLC calibrated against a known standard. Quantitation on SDS-PAGE against a known standard.
Endotoxin Level	Endotoxin level is <0.01ng/ug or <0.1EU/ug.
Amino acid sequence	MQRCSTTWGI RDTNYLIENL KDDPPSKCSC SGNVTSCCLCL SVPTDDCTTP CYREGLLQLT NATQKSRLLP VFHRVKRIVE VLKNITCPSF SCEKPCNQTM AGNTMSFLKS LLGTFQKTEM QRQKSRP
Storage	Lyophilized product is very stable at -20 degrees. Reconstituted material should be aliquoted and frozen at -20. It is recommended to add a carrier protein (0.1% HSA or BSA) for long term storage.

GENE INFORMATION

Gene Name	IL9 interleukin 9 [<i>Mus musculus</i>]
Official Symbol	IL9
Synonyms	IL9; interleukin 9; P40; IL-9; interleukin-9; cytokine P40; T-cell growth factor P40; IL-9; homolog of mouse T cell and mast cell growth factor 40; HP40; p40 cytokine; p40 cytokine; p40 T-cell and mast cell growth factor

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Gene ID	16198
mRNA Refseq	NM_008373
Protein Refseq	NP_032399
UniProt ID	P15247
Chromosome Location	13 B1; 13 35.0 cM
Pathway	Asthma; Cytokine-cytokine receptor interaction; Jak-STAT signaling pathway
Function	cytokine activity; cytokine receptor binding; growth factor activity

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