

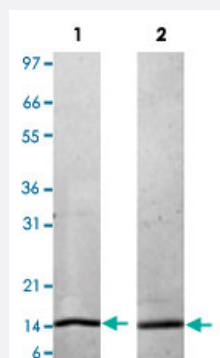
Bioactive

IL9 (Human) Recombinant Protein

Catalog # P4418

Size 10 ug

Applications



Lane 1: non-reducing conditions

Lane 2: reducing conditions

Result of activity analysis

Result of activity analysis

MO7e cells were cultured with 0 to 100 ng/mL human IL9. Cell proliferation was measured after 5 days and the linear portion of the curve was used to calculate the ED50.

Specification

Product Description	Human IL9 (P15248) recombinant protein expressed in <i>Escherichia coli</i> .
Sequence	MQGCPTLAGILDINFLINKMQEDPASKCHCSANVTSCCLGLIPSDNCTRPCFSERLSQMTNTTMQT RYPLIFSRVKKSVEVLKNNKCPYFSCEQPCNQTTAGNALTFLKSLLLEIFQKEKMRGMRGKI
Host	<i>Escherichia coli</i>
Theoretical MW (kDa)	14
Form	Lyophilized
Preparation Method	<i>Escherichia coli</i> expression system
Endotoxin Level	< 0.1 EU/ug

Activity	The activity is determined by the dose-dependent proliferation of human MO7e cells. The expected E _{D50} for this effect is 0.5-0.7 ng/mL.
Quality Control Testing	1 ug/lane in 4-20% Tris-Glycine gel Stained with Coomassie Blue Lane 1: non-reducing conditions Lane 2: reducing conditions
Storage Buffer	Lyophilized from 10 mM Na ₂ PO ₄ , pH 7.5
Storage Instruction	Store at -20°C on dry atmosphere. After reconstitution with sterilized water, store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Note	Result of activity analysis Result of activity analysis MO7e cells were cultured with 0 to 100 ng/mL human IL9. Cell proliferation was measured after 5 day s and the linear portion of the curve was us used to calculate the ED50.

Applications

- Functional Study
- SDS-PAGE

Gene Info — IL9

Entrez GeneID	3578
Protein Accession#	P15248
Gene Name	IL9
Gene Alias	HP40, IL-9, P40
Gene Description	interleukin 9
Omim ID	146931
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene is a cytokine that acts as a regulator of a variety of hematopoietic cells. This cytokine stimulates cell proliferation and prevents apoptosis. It functions through the interleukin 9 receptor (IL9R), which activates different signal transducer and activator (STAT) proteins and thus connects this cytokine to various biological processes. The gene encoding this cytokine has been identified as a candidate gene for asthma. Genetic studies on a mouse model of asthma demonstrated that this cytokine is a determining factor in the pathogenesis of bronchial hyperresponsiveness. [provided by RefSeq]

Other Designations

OTTHUMP00000159423|T-cell growth factor p40|homolog of mouse T cell and mast cell growth factor 40|p40 T-cell and mast cell growth factor|p40 cytokine

Pathway

- [Asthma](#)
- [Cytokine-cytokine receptor interaction](#)
- [Jak-STAT signaling pathway](#)

Disease

- [Asthma](#)
- [Atherosclerosis](#)
- [Berylliosis](#)
- [Brain Ischemia](#)
- [Bronchial Hyperreactivity](#)
- [Bronchiolitis](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Chlamydia Infections](#)
- [Chorioamnionitis](#)
- [Chronic Disease](#)
- [Constriction](#)
- [Coronary Artery Disease](#)

- [Diabetes Mellitus](#)
- [Edema](#)
- [Fetal Membranes](#)
- [Food Hypersensitivity](#)
- [Genetic Predisposition to Disease](#)
- [Hematologic Diseases](#)
- [Hodgkin Disease](#)
- [Hypersensitivity](#)
- [Hypertension](#)
- [Infant](#)
- [Inflammation](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Migraine Disorders](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Obstetric Labor](#)
- [Occupational Diseases](#)
- [Osteoporosis](#)
- [Pre-Eclampsia](#)
- [Premature Birth](#)
- [Recurrence](#)
- [Respiratory Hypersensitivity](#)
- [Respiratory Sounds](#)
- [Respiratory Syncytial Virus Infections](#)
- [Schizophrenia](#)

- [Stroke](#)
- [Trachoma](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)