

# IL-9 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54262

### **Product Information**

**Application** IHC-P, IHC-F, IF, ICC, E

Primary Accession
Reactivity
Human
Host
Clonality
Polyclonal
Calculated MW
Physical State
P15248
Human
Puman
Rabbit
Polyclonal
15909
Liquid

Immunogen KLH conjugated synthetic peptide derived from human IL-9

Epitope Specificity 51-144/144

**Isotype** IgG

**Purity** affinity purified by Protein A

**Buffer** 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

**SUBCELLULAR LOCATION** Secreted.

**SIMILARITY** Belongs to the IL-7/IL-9 family.

**Important Note** This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

**Background Descriptions** The protein encoded by this gene is a cytokine that actsas a regulator of a

variety of hematopoietic cells. This cytokinestimulates 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 geneencoding this cytokine has been identified as a candidate gene for as thma. Genetic studies on a mouse model of as thma demonstrated that this cytokine is a determining factor in the pathogenesis of bronchial hyperresponsiveness.

[provided by RefSeq, Jul 2008].

#### **Additional Information**

Gene ID 3578

Other Names Interleukin-9, IL-9, Cytokine P40, T-cell growth factor P40, IL9

**Dilution** IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-

10000

**Storage** Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

## **Protein Information**

Name

IL9

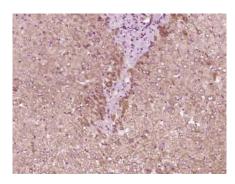
**Function** 

Multifunctional cytokine secreted mainly by T-helper 2 lymphocytes and also mast cells or NKT cells that plays important roles in the immune response against parasites (PubMed:29742432). Affects intestinal epithelial permeability and adaptive immunity (PubMed:29742432). In addition, induces the differentiation of specific T-cell subsets such as IL-17 producing helper T-cells (TH17) and also proliferation and differentiation of mast cells. Mechanistically, exerts its biological effects through a receptor composed of IL9R subunit and a signal transducing subunit IL2RG. Receptor stimulation results in the rapid activation of JAK1 and JAK3 kinase activities leading to STAT1, STAT3 and STAT5-mediated transcriptional programs. Induction of differentiation genes seems to be mediated by STAT1 alone, while protection of cells from apoptosis depends on STAT3 and STAT5.

**Cellular Location** 

Secreted.

## **Images**



Paraformaldehyde-fixed, paraffin embedded (Human liver carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (IL-9) Polyclonal Antibody, Unconjugated (AP54262) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.