

**IL-9 Antibody**  
**Catalog # ASC11705****Specification**

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**IL-9 Antibody - Product Information**

Application	WB, IHC, IF
Primary Accession	<a href="#">P15248</a>
Other Accession	<a href="#">NP_000581</a> , <a href="#">10834980</a>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 13 kDa
Application Notes	Observed: 22kDa KDa IL-9 antibody can be used for detection of IL-9 by Western blot at 1 - 2 µg/ml.

**IL-9 Antibody - Additional Information**

Gene ID 3578

**Target/Specificity**

IL9; IL-9 antibody is human specific. IL-9 antibody is predicted to no cross-react with IL-7.

**Reconstitution & Storage**

IL-9 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

**Precautions**

IL-9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**IL-9 Antibody - 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:<a href="http://www.uniprot.org/citations/29742432" target="\_blank">29742432</a>). Affects intestinal epithelial permeability and adaptive immunity (PubMed:<a href="http://www.uniprot.org/citations/29742432" target="\_blank">29742432</a>). 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.

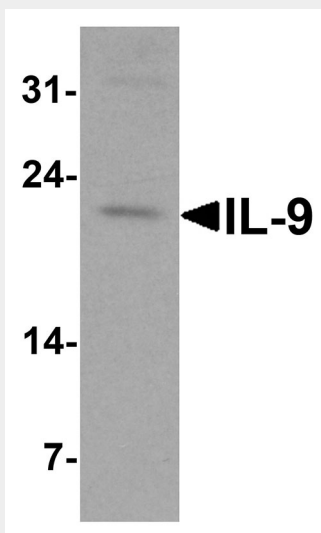
**Cellular Location**  
Secreted.

### IL-9 Antibody - Protocols

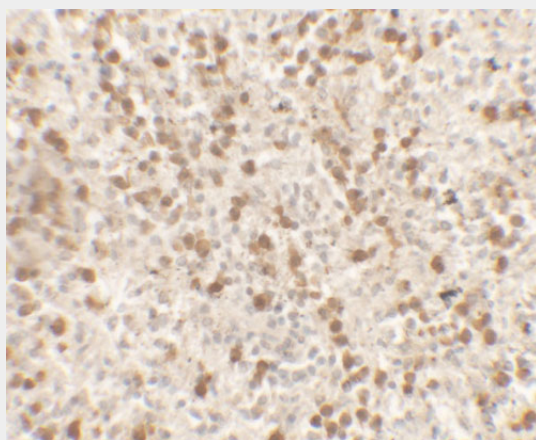
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

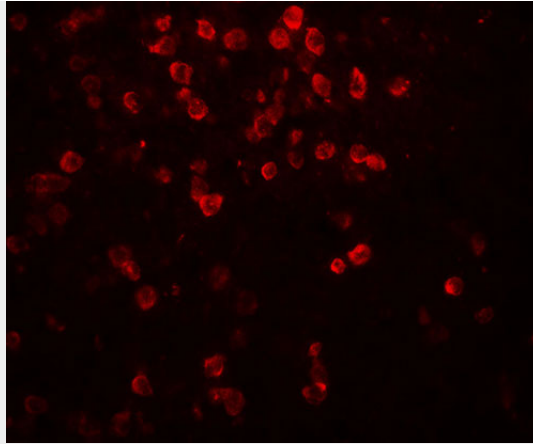
### IL-9 Antibody - Images



Western blot analysis of IL-9 in human spleen tissue lysate at 1 µg/ml.



Immunohistochemistry of IL-9 in human spleen tissue with IL-9 antibody at 5 µg/mL.



Immunofluorescence of IL-9 in human spleen tissue with IL-9 antibody at 20 µg/mL.

### **IL-9 Antibody - Background**

Interleukin 9 (IL-9) is a cytokine secreted by TH2 lymphocytes that acts as a regulator of a variety of hematopoietic cells, stimulates cell proliferation and prevents apoptosis (1,2). It functions through the interleukin 9 receptor (IL9R), which activates different signal transducer and activator (STAT) proteins (3). The IL-9 gene has been identified as a candidate gene for asthma (4). Genetic studies on a mouse model of asthma demonstrated that this cytokine is a determining factor in the pathogenesis of bronchial hyperresponsiveness (5).

### **IL-9 Antibody - References**

Renauld JC, Goethals A, Houssiau F, et al. Cloning and expression of a cDNA for the human homolog of mouse T cell and mast cell growth factor P40. *Cytokine* 1990; 2:9-12.  
Tete S, Saggini A, Maccauro G, et al. Interleukin-9 and mast cells. *J. Biol. Homeost. Agents* 2012; 26:319-26.  
Knoops L and Renauld JC. IL-9 and its receptor: from signal transduction to tumorigenesis. *Growth Factors* 2004; 22:207-15.  
Nicolaidis NC, Holroyd KJ, Ewart SL, et al. Interleukin 9: a candidate gene for asthma. *Proc. Natl. Acad. Sci. USA* 1997; 94:13175-80.