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Anti- IL-9 Monoclonal Antibody
Catalog # ABO15022

Specification

Anti- IL-9 Monoclonal Antibody - Product Information

Application	**WB**
Primary Accession	P15248
Host	**Mouse**
Isotype	**Mouse IgG2b, κ**
Reactivity	**Rat, Mouse**
Clonality	**Monoclonal**
Format	**Lyophilized**

Description
Anti- IL-9 Monoclonal Antibody . Tested in WB applications. This antibody reacts with Mouse, Rat.

Reconstitution
Add 0.2ml of distilled water will yield a concentration of 500 µg/ml.

Anti- IL-9 Monoclonal Antibody - Additional Information

Gene ID 3578

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

Calculated MW
16 kDa KDa

Application Details
Western blot, 0.25-0.5&mu:g/ml, Mouse, Rat

Protein Name
Interleukin-9

Contents
PBS, pH 7.0. Contains no stabilizers or preservatives

Immunogen
Human IL-9 coupled to ovalbumin

Purification
Immunogen affinity purified.

Storage	**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

Anti- IL-9 Monoclonal Antibody - Protein Information

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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.

Anti- IL-9 Monoclonal 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 Cytomety
- Cell Culture

Anti- IL-9 Monoclonal Antibody - Images

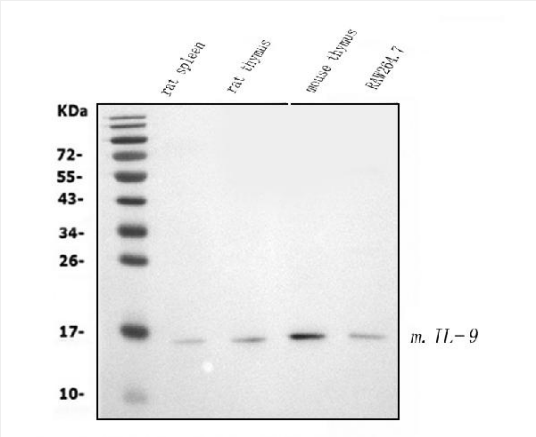

Figure 1. Western blot analysis of IL-9 using anti-IL-9 antibody (M02925).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.
Lane 1: rat spleen tissue lysates,

Lane 2: rat thymus tissue lysates,
Lane 3: mouse thymus tissue lysates,
Lane 4: mouse RAW264.7 whole cell lysates.
After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with mouse anti-IL-9 antigen affinity purified monoclonal antibody (Catalog # M02925) at 0.5 µg/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-mouse IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1001) with Tanon 5200 system. A specific band was detected for IL-9 at approximately 16KD. The expected band size for IL-9 is at 16KD.

Anti- IL-9 Monoclonal Antibody - Background

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, Jul 2008]