

# Anti-IL-7 Antibody

**Catalog # ABO10786** 

## **Specification**

### **Anti-IL-7 Antibody - Product Information**

Application WB, IHC
Primary Accession P10168
Host Rabbit
Reactivity Mouse
Clonality Polyclonal
Format Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for Interleukin-7(IL7) detection. Tested with WB, IHC-P in Mouse.

#### Reconstitution

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

#### **Anti-IL-7 Antibody - Additional Information**

**Gene ID** 16196

**Other Names** 

Interleukin-7, IL-7, II7, II-7

**Calculated MW** 

17727 MW KDa

#### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Mouse, By Heat<br/>blot, 0.1-0.5  $\mu$ g/ml, Mouse<br/>br>

# **Subcellular Localization**

Secreted.

### **Protein Name**

Interleukin-7(IL-7)

#### **Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

#### **Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of mouse IL7(26-42aa ECHIKDKEGKAYESVLM).

#### **Purification**

Immunogen affinity purified.

### **Cross Reactivity**

No cross reactivity with other proteins



Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

# **Anti-IL-7 Antibody - Protein Information**

Name II7

Synonyms II-7

#### **Function**

Hematopoietic cytokine that plays an essential role in the development, expansion, and survival of naive and memory T-cells and B- cells thereby regulating the number of mature lymphocytes and maintaining lymphoid homeostasis (PubMed:<a href="http://www.uniprot.org/citations/7699333" target="\_blank">7699333</a>, PubMed:<a href="http://www.uniprot.org/citations/28811625" target="\_blank">28811625</a>). Mechanistically, exerts its biological effects through a receptor composed of IL7RA subunit and the cytokine receptor common subunit gamma/CSF2RG. Binding to the receptor leads to activation of various kinases including JAK1 or JAK3 depending on the cell type and subsequently propagation of signals through activation of several downstream signaling pathways including the PI3K/Akt/mTOR or the JAK- STAT5.

**Cellular Location** 

Secreted {ECO:0000250|UniProtKB:P13232}.

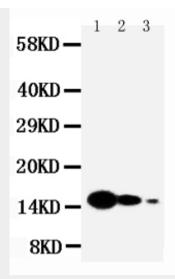
#### **Anti-IL-7 Antibody - Protocols**

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

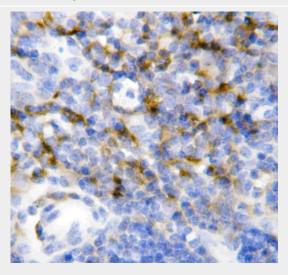
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

#### Anti-IL-7 Antibody - Images





Anti-IL7 antibody, ABO10786, Western blottingLane 1: Recombinant Mouse IL-7 Protein 10ngLane 2: Recombinant Mouse IL-7 Protein 5ngLane 3: Recombinant Mouse IL-7 Protein 2.5ng



Anti-IL7 antibody, ABO10786, IHC(P)IHC(P): Mouse Spleen Tissue

### Anti-IL-7 Antibody - Background

IL-7, Interleukin 7, is a protein that in humans is encoded by the IL-7 gene. IL-7 a hematopoietic growth factor secreted by stromal cells in the red marrow and thymus. It is also produced by keratinocytes, dendritic cells, hepatocytes, neurons, and epithelial cells but is not produced by lymphocytes. By the combination of approaches, IL-7 is located on 8q12-q13. IL-7 is critical for early T-cell development and homeostasis of naive and memory CD8-positive T cells. It signals through the IL-7 receptor complex, which consists of the IL7R-alpha chain and the common IL2R-gamma chain is critical for early T-cell development and homeostasis of naive and memory CD8 -positive T cells. It signals through the IL-7 receptor complex, which consists of the IL7R-alpha chain and the common IL2R-gamma chain.