

## Anti-IL-7 Antibody Catalog # ABO12208

# **Specification**

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

Application WB, E
Primary Accession P13232
Host Reactivity Human
Clonality Polyclonal
Format Lyophilized

**Description** 

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

Human. < br>

### Reconstitution

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

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

**Gene ID 3574** 

**Other Names** 

Interleukin-7, IL-7, IL7

Calculated MW 20187 MW KDa

**Application Details** 

Western blot, 0.1-0.5 μg/ml, Human, -<br/>br>ELISA , 0.1-0.5 μg/ml, Human<br/>br>

**Subcellular Localization** 

Secreted.

**Protein Name** 

Interleukin-7

**Contents** 

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

**Immunogen** 

E. coli-derived human IL7 recombinant protein (Position: D26-H177). Human IL7 shares 56.4% and 57% amino acid (aa) sequence identity with mouse and rat IL7, respectively.

**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.

**Sequence Similarities**Belongs to the IL-7/IL-9 family.

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

#### Name IL7

#### **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/25870237" target="\_blank">25870237</a>, PubMed:<a href="http://www.uniprot.org/citations/7527823" target="\_blank">7527823</a>). Mechanistically, exerts its biological effects through a receptor composed of IL7RA subunit and the cytokine receptor common subunit gamma/CSF2RG (PubMed:<a href="http://www.uniprot.org/citations/8128231" target="\_blank">8128231</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/18523275" target="\_blank">18523275</a>, PubMed:<a href="http://www.uniprot.org/citations/20974963" target="\_blank">20974963</a>, PubMed:<a href="http://www.uniprot.org/citations/20974963" target="\_blank">20974963</a>).

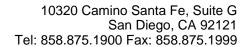
**Cellular Location** Secreted.

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

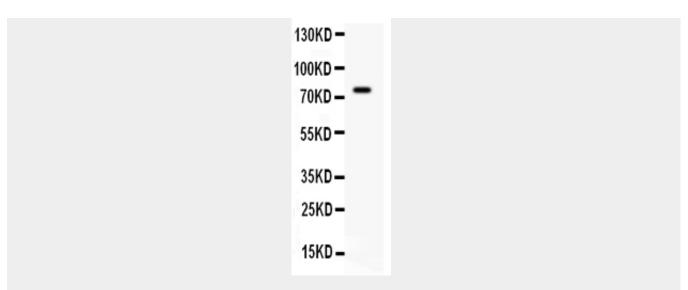
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# Anti-IL-7 Antibody - Images







Anti- IL7 Picoband antibody, ABO12208, Western blottingAll lanes: Anti IL7 (ABO12208) at 0.5ug/mlWB: K562 Whole Cell Lysate at 40ugPredicted bind size: 20KDObserved bind size: 75KD

### 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.