

## **Anti-IL-7 Picoband Antibody**

**Catalog # ABO12557** 

#### **Specification**

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

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

**Description** 

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

#### Reconstitution

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

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

**Gene ID** 16196

**Other Names** 

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

Calculated MW 17727 MW KDa

**Application Details** 

Western blot, 0.1-0.5 µg/ml, Mouse<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 mouse IL7 recombinant protein (Position: E26-I154). Mouse IL7 shares 56.4% and 87.6% amino acid (aa) sequence identity with human 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.

## **Anti-IL-7 Picoband 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/28811625" target="\_blank">28811625</a>, PubMed:<a href="http://www.uniprot.org/citations/7699333" target="\_blank">7699333</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 Picoband 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 Picoband Antibody - Images**





Western blot analysis of IL7 expression in mouse brain extract (lane 1), mouse thymus extract (lane 2) and NIH3T3 whole cell lysates (lane 3). IL7 at 20KD was detected using rabbit anti- IL7 Antigen Affinity purified polyclonal antibody (Catalog # ABO12557) at 0.5 ??g/mL. The blot was developed using chemiluminescence (ECL) method .

# **Anti-IL-7 Picoband Antibody - Background**

Interleukin 7 (IL-7) is a protein that in humans is encoded by the IL7Â gene. The protein encoded by this gene is a cytokine important for B and T cell development. This cytokine and the hepatocyte growth factor (HGF) form a heterodimer that functions as a pre-pro-B cell growth-stimulating factor. And it is found to be a cofactor for V(D)J rearrangement of the T cell receptor beta (TCRB) during early T cell development. In addition, this cytokine can be produced locally by intestinal epithelial and epithelial goblet cells, and may serve as a regulatory factor for intestinal mucosal lymphocytes. Knockout studies in mice suggested that this cytokine plays an essential role in lymphoid cell survival. Alternative splicing results in multiple transcript variants encoding distinct isoforms. Additional splice variants have been described but their presence in normal tissues has not been confirmed.