

Anti-IL-7 Picoband Antibody

Catalog # ABO12557

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.

Additional Information

Gene ID	16196
Other Names	Interleukin-7, IL-7, IL7, IL-7
Calculated MW	17727
Application Details	Western blot, 0.1-0.5 µg/ml, Mouse
Subcellular Localization	Secreted.
Source	Eukaryota
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 reconstitution, 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.

Protein Information

Name	IL7
Synonyms	IL-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: 28811625 , PubMed: 7699333). 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}.

Background

Interleukin 7 (IL-7) is a protein that in humans is encoded by the *IL7* 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.

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 µg/mL. The blot was developed using chemiluminescence (ECL) method .

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.