

Anti-IL-15 Antibody

Catalog # ABO11935

Specification

Anti-IL-15 Antibody - Product Information

Application WB, E
Primary Accession P40933
Host Rabbit
Reactivity Human
Clonality Polyclonal
Format Lyophilized

Description

Rabbit IgG polyclonal antibody for Interleukin-15(IL15) detection. Tested with WB, ELISA in Human.

Reconstitution

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

Anti-IL-15 Antibody - Additional Information

Gene ID 3600

Other Names

Interleukin-15, IL-15, IL15

Calculated MW

18086 MW KDa

Application Details

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

Subcellular Localization

Isoform IL15-S48AA: Secreted.

Tissue Specificity

Most abundant in placenta and skeletal muscle. It is also detected in the heart, lung, liver and kidney. IL15- S21AA is preferentially expressed in tissues such as testis and thymus.

Protein Name

Interleukin-15

Contents

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

Immunogen

E.coli-derived human IL-15 recombinant protein (Position: N49-S162). Human IL-15 shares 70% amino acid (aa) sequence identity with both mouse and rat IL-15.

Purification

Immunogen affinity purified.





Cross ReactivityNo 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-15/IL-21 family.

Anti-IL-15 Antibody - Protein Information

Name IL15

Function

Cytokine that plays a major role in the development of inflammatory and protective immune responses to microbial invaders and parasites by modulating immune cells of both the innate and adaptive immune systems (PubMed: 15123770). Stimulates the proliferation of natural killer cells, T-cells and B-cells and promotes the secretion of several cytokines (PubMed: 8178155, PubMed:9326248). In monocytes, induces the production of IL8 and monocyte chemotactic protein 1/CCL2, two chemokines that attract neutrophils and monocytes respectively to sites of infection (PubMed: 9326248). Unlike most cytokines, which are secreted in soluble form, IL15 is expressed in association with its high affinity IL15RA on the surface of IL15-producing cells and delivers signals to target cells that express IL2RB and IL2RG receptor subunits (PubMed: 10233906, PubMed:23104097, PubMed:8026467). Binding to its receptor triggers the phosphorylation of JAK1 and JAK3 and the recruitment and subsequent phosphorylation of signal transducer and activator of transcription-3/STAT3 and STAT5 (PubMed: 7568001). In mast cells, induces the rapid tyrosine phosphorylation of STAT6 and thereby controls mast cell survival and release of cytokines such as IL4 (By similarity).

Cellular Location

[Isoform IL15-S48AA]: Secreted.

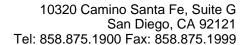
Tissue Location

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Anti-IL-15 Antibody - Protocols

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

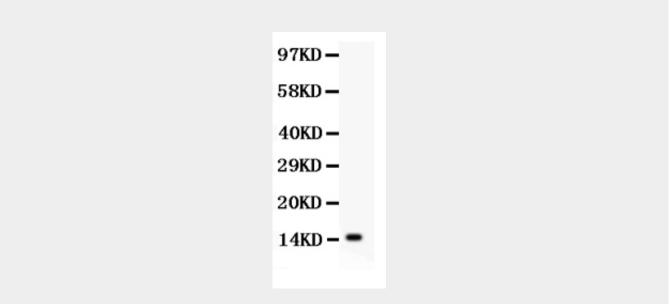
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence





- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

Anti-IL-15 Antibody - Images



Anti- IL-15 antibody, ABO11935, Western blottingAll lanes: Anti IL-15 (ABO11935) at 0.5ug/mlWB: Recombinant Human IL-15 Protein 0.5ngPredicted bind size: 15KDObserved bind size: 15KD

Anti-IL-15 Antibody - Background

Interleukin (IL)-15 is a cytokine with the ability to stimulate the proliferation activity of Th1 and/or Th2 lymphocytes. This gene is mapped to human chromosome 4q31 by fluorescence in situ hybridization. IL-15 is a novel cytokine whose effects on T-cell activation and proliferation are similar to those of interleukin-2 (IL-2), presumably because IL-15 utilizes the beta and gamma chains of the IL-2 receptor. IL-15 can play a role in the initiation and outcome of acute and chronic rejection. Anti-IL-15 therapy in combination with classic immunosuppression therapy might be beneficial in the prevention of acute, and especially chronic, allograft rejection.