

Anti-IL-2 Antibody
Catalog # ABO11738**Specification**

Anti-IL-2 Antibody - Product Information

Application	WB
Primary Accession	P17108
Host	Rabbit
Reactivity	Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Interleukin-2(IL-2) detection. Tested with WB in Rat.

Reconstitution

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

Anti-IL-2 Antibody - Additional Information

Gene ID 116562

Other Names

Interleukin-2, IL-2, T-cell growth factor, TCGF, IL2, IL-2

Calculated MW

17633 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Rat

Subcellular Localization

Secreted.

Protein Name

Interleukin-2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Na₃N.

Immunogen

E.coli-derived rat IL-2 recombinant protein (Position: A21-Q155). Rat IL-2 shares 66% and 80% amino acid (aa) sequences identity with human and mouse IL-2, 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.

Anti-IL-2 Antibody - Protein Information**Name** IL2**Synonyms** IL-2**Function**

Cytokine produced by activated CD4-positive helper T-cells and to a lesser extent activated CD8-positive T-cells and natural killer (NK) cells that plays pivotal roles in the immune response and tolerance. Binds to a receptor complex composed of either the high-affinity trimeric IL-2R (IL2RA/CD25, IL2RB/CD122 and IL2RG/CD132) or the low-affinity dimeric IL-2R (IL2RB and IL2RG). Interaction with the receptor leads to oligomerization and conformation changes in the IL-2R subunits resulting in downstream signaling starting with phosphorylation of JAK1 and JAK3. In turn, JAK1 and JAK3 phosphorylate the receptor to form a docking site leading to the phosphorylation of several substrates including STAT5. This process leads to activation of several pathways including STAT, phosphoinositide-3-kinase/PI3K and mitogen-activated protein kinase/MAPK pathways. Functions as a T-cell growth factor and can increase NK-cell cytolytic activity as well. Promotes strong proliferation of activated B-cells and subsequently immunoglobulin production. Plays a pivotal role in regulating the adaptive immune system by controlling the survival and proliferation of regulatory T-cells, which are required for the maintenance of immune tolerance. Moreover, participates in the differentiation and homeostasis of effector T-cell subsets, including Th1, Th2, Th17 as well as memory CD8-positive T-cells.

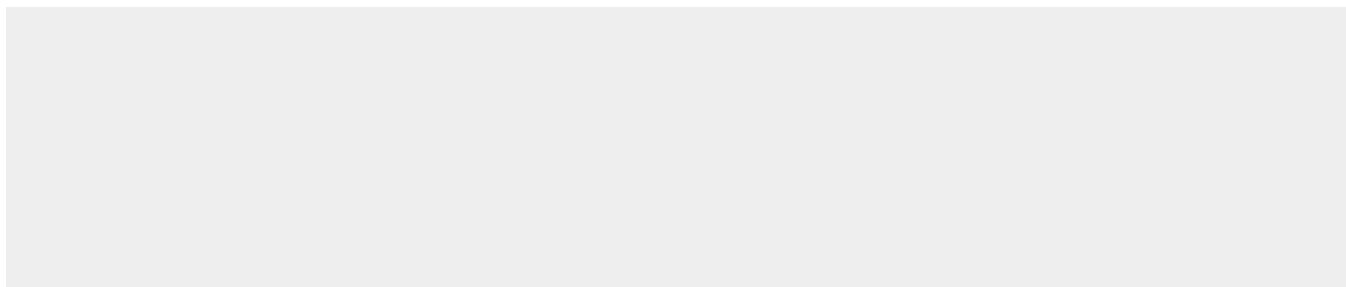
Cellular Location

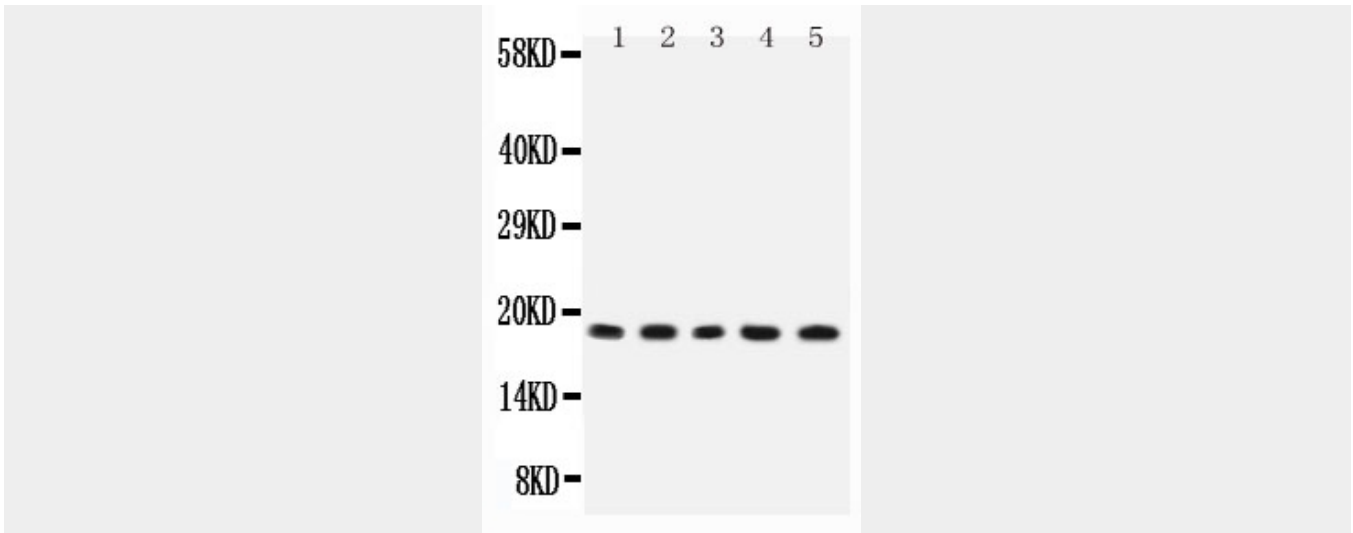
Secreted.

Anti-IL-2 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 Cytometry](#)
- [Cell Culture](#)

Anti-IL-2 Antibody - Images



Anti-IL-2 Picoband antibody, ABO11738-1.jpg All lanes: Anti-IL-2(ABO11738) at 0.5ug/ml
Lane 1: Rat Thymus Tissue Lysate at 40ug
Lane 2: Rat Liver Tissue Lysate at 40ug
Lane 3: NRK Whole Cell Lysate at 40ug
Lane 4: PC12 Whole Cell Lysate at 40ug
Lane 5: RH35 Whole Cell Lysate at 40ug
Predicted bind size: 18KD
Observed bind size: 18KD

Anti-IL-2 Antibody - Background

Interleukin-2 (IL2), formerly referred to as T-cell growth factor, is a powerfully immunoregulatory lymphokine that is produced by lectin- or antigen-activated T cells. It is produced not only by mature T lymphocytes on stimulation but also constitutively by certain T-cell lymphoma cell lines. The lymphokine interleukin-2 (IL-2) is responsible for autocrine cell cycle progression and regulation of immune responses. IL-2 expression in mature thymocytes and T cells has been found to be tightly controlled by monoallelic expression. IL-2 can act as a growth hormone for both B and T lymphocytes. This gene for interleukin 2 (IL2) is assigned to chromosome 4. IL-2 is a 15.5KDa glycoprotein, consisting of 153 amino acids in precursor form and 133 amino acids in mature form.