

IL-2 Antibody

Rabbit Polyclonal Antibody Catalog # ABV10848

Specification

IL-2 Antibody - Product Information

Application WB
Primary Accession P17108
Reactivity Rat
Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 17633

IL-2 Antibody - Additional Information

Gene ID 116562

Positive Control Application & Usage Recombinant rat IL-2 Western blot analysis (0.5-4 μ g/ml). However, the optimal conditions should be determined individually. Recombinant human IL-2 can be used as a positive control.

Other Names

IL-2, IL2, IL 2, Interluekin-2, Interluekin 2, interluekin2

Target/Specificity

IL-2

Antibody Form

Liquid

Appearance

Colorless liquid

Formulation

 $100 \mu g$ (0.5 mg/ml) affinity purified rabbit anti-rat IL-2 polyclonal antibody in phosphate buffered saline (PBS), pH 7.2, containing 30% glycerol, 0.5%BSA and 0.01% thimerosal.

Handling

The antibody solution should be gently mixed before use.

Reconstitution & Storage

-20 °C

Background Descriptions

Precautions



IL-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IL-2 Antibody - Protein Information

Name II2

Synonyms II-2

Function

Cytokine produced by activated CD4-positive helper T-cells and to a lesser extend 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.

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 Cytomety
- Cell Culture

IL-2 Antibody - Images

IL-2 Antibody - Background

IL-2 is a potent immuno-modulator, which mediates a wide range of immune and inflammatory responses. Human IL-2 is a 15.5 kDa protein containing 134 amino acid residues.