

## **IL-2 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58236

## **Specification**

# **IL-2 Polyclonal Antibody - Product Information**

Application WB, IHC-P, IHC-F, IF

Primary Accession
Reactivity
Rat
Host
Clonality
Calculated MW
Rodats
P04351
Rat
Rabbit
Polyclonal
19400

# IL-2 Polyclonal Antibody - Additional Information

**Gene ID** 16183

#### **Other Names**

Interleukin-2, IL-2, T-cell growth factor, TCGF, II2, II-2

## **Format**

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

#### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

# **IL-2 Polyclonal 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 (PubMed:<a href="http://www.uniprot.org/citations/9814585" target="\_blank">9814585</a>, PubMed:<a href="http://www.uniprot.org/citations/14614860" target="\_blank">14614860</a>). 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 (PubMed:<a href="http://www.uniprot.org/citations/14614860" target="\_blank">14614860</a>, PubMed:<a href="http://www.uniprot.org/citations/27018889" target="\_blank">27018889</a>, 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 (PubMed:<a href="http://www.uniprot.org/citations/14614860" target="\_blank">14614860</a>). Moreover, participates in the differentiation and homeostasis of effector T-cell subsets, including Th1, Th2, Th17 as well as memory CD8-positive T- cells (PubMed:<a href="http://www.uniprot.org/citations/9814585" target="blank">9814585</a>).

Cellular Location Secreted.

## **Tissue Location**

Produced by immune cells including dendritic cells. In contrast, macrophages do not produce IL2 upon bacterial stimulation

# **IL-2 Polyclonal Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# **IL-2 Polyclonal Antibody - Images**