

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, E

Primary Accession
Reactivity
Rat
Host
Clonality
Calculated MW
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

Dilution

 $< span class = "dilution_WB">WB~~1:1000 < /span> < br \> < span class = "dilution_IHC-P">IHC-P~~N/A < /span> < br \> < span class = "dilution_IHC-F">IHC-F~~N/A < /span> < br \> < span class = "dilution_IF">IF~~1:50~200 < /span> < br \> < span class = "dilution_E">E~~N/A < /span> < br \> < span class = "dilution_E">E~~N/A < /span> < span class = "dilution_E">E~~N/A < /span < span class = "dilution_E">E~~N/A < span class =$

Format

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

Storage

Store at -20 $^{\circ}$ 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 $^{\circ}$ C.

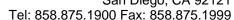
IL-2 Polyclonal Antibody - Protein Information

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:14614860, PubMed:9814585). 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: 14614860, PubMed:27018889). 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:14614860). 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:9814585).

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

IL-2 Polyclonal Antibody - Images