

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
Physical State
Reactivity
Rat
Rabbit
Polyclonal
Liquid

Immunogen KLH conjugated synthetic peptide derived

from mouse IL-2

Epitope Specificity 81-169/169

Isotype IgG

Purity

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Secreted.

SIMILARITY Belongs to the IL-2 family.

DISEASE Note=A chromosomal aberration involving

IL2 is found in a form of T-cell acute lymphoblastic leukemia (T-ALL).
Translocation t(4;16)(q26;p13) with

involves TNFRSF17.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

affinity purified by Protein A

The protein encoded by this gene is a secreted cytokine that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine is a heterotrimeric protein complex whose gamma chain is also shared by interleukin 4 (IL4) and interleukin 7 (IL7). The expression of this gene in mature thymocytes is monoallelic, which represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests an essential role of this gene in the immune response to antigenic stimuli. [provided by RefSeq, Jul 2008]

IL-2 Polyclonal Antibody - Additional Information

Gene ID 16183

Other Names

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

Dilution



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

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.

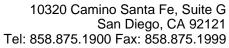
Tissue Location

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





Tel. 000.070.1900 Fax. 000.070.1999

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

IL-2 Polyclonal Antibody - Images