

# IL-2 Polyclonal Antibody

Catalog # AP70506

## Product Information

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Application	WB, IHC-P
Primary Accession	<a href="#">P60568</a>
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17628

## Additional Information

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Gene ID	3558
Other Names	IL2; Interleukin-2; IL-2; T-cell growth factor; TCGF; Aldesleukin
Dilution	WB~~IHC-p: 100-300.Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications. IHC-P~~IHC-p: 100-300.Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20°C

## Protein Information

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Name	IL2
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="#">6438535</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) (PubMed: <a href="#">16293754</a> , PubMed: <a href="#">16477002</a> ). 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 (PubMed: <a href="#">7973659</a> ). 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="#">8580378</a> ). This process leads to activation of several pathways including STAT, phosphoinositide-3-kinase/PI3K and mitogen-activated protein kinase/MAPK pathways (PubMed: <a href="#">25142963</a> ). Functions as a T-cell growth factor and can increase NK-cell cytolytic activity as well (PubMed: <a href="#">6608729</a> ). Promotes strong proliferation of activated B-cells and subsequently immunoglobulin production (PubMed: <a href="#">6438535</a> ). 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.

## Background

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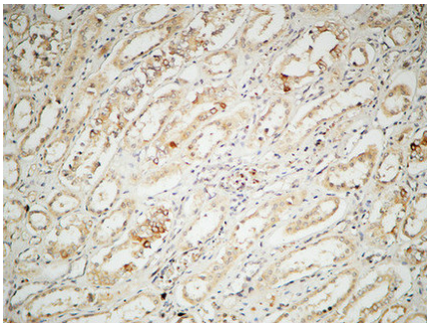
Produced by T-cells in response to antigenic or mitogenic stimulation, this protein is required for T-cell proliferation and other activities crucial to regulation of the immune response. Can stimulate B-cells, monocytes, lymphokine- activated killer cells, natural killer cells, and glioma cells.

## Images

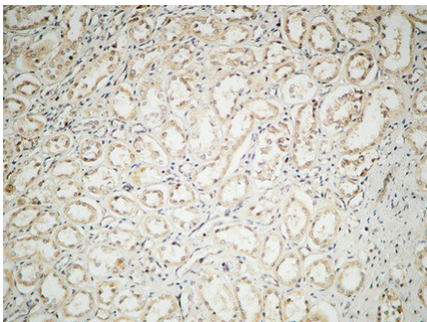
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Western Blot analysis of various cells using IL-2 Polyclonal Antibody

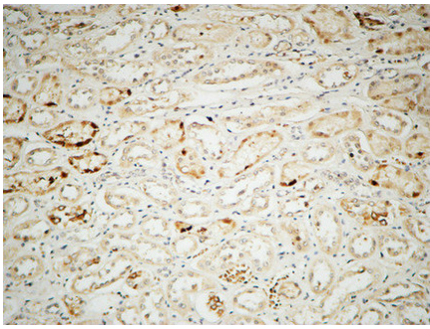


Immunohistochemical analysis of paraffin-embedded Human kidney. 1, Antibody was diluted at 1:100(4°,overnight). 2, High-pressure and temperature EDTA, pH8.0 was used for antigen retrieval. 3,Secondary antibody was diluted at 1:200(room temperature, 30min).



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