

IL-2 Polyclonal Antibody
Catalog # AP70506**Specification**

IL-2 Polyclonal Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P60568
Reactivity	Human, Rat
Host	Rabbit
Clonality	Polyclonal

IL-2 Polyclonal Antibody - Additional Information**Gene ID** 3558**Other Names**

IL2; Interleukin-2; IL-2; T-cell growth factor; TCGF; Aldesleukin

Dilution

WB~~1:1000

IHC-P~~N/A

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

IL-2 Polyclonal Antibody - Protein Information**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="http://www.uniprot.org/citations/6438535" target="_blank">6438535](http://www.uniprot.org/citations/6438535)>). 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="http://www.uniprot.org/citations/16293754" target="_blank">16293754](http://www.uniprot.org/citations/16293754)>, PubMed:<[a href="http://www.uniprot.org/citations/16477002" target="_blank">16477002](http://www.uniprot.org/citations/16477002)>). 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="http://www.uniprot.org/citations/7973659" target="_blank">7973659](http://www.uniprot.org/citations/7973659)>). 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/8580378" target="_blank">8580378](http://www.uniprot.org/citations/8580378)>). This process leads to activation of several pathways including STAT, phosphoinositide-3- kinase/PI3K and mitogen-activated protein kinase/MAPK pathways (PubMed:<

[25142963](http://www.uniprot.org/citations/25142963)). Functions as a T-cell growth factor and can increase NK-cell cytolytic activity as well (PubMed:[6608729](http://www.uniprot.org/citations/6608729)). Promotes strong proliferation of activated B-cells and subsequently immunoglobulin production (PubMed:[6438535](http://www.uniprot.org/citations/6438535)). 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

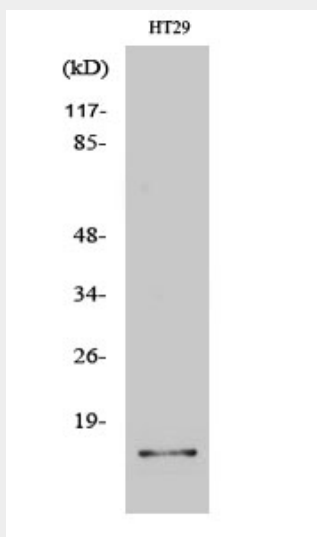
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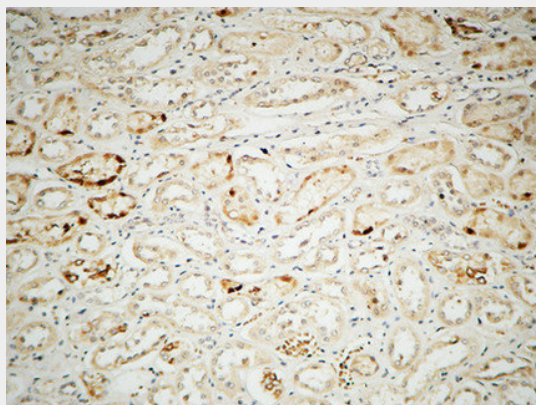
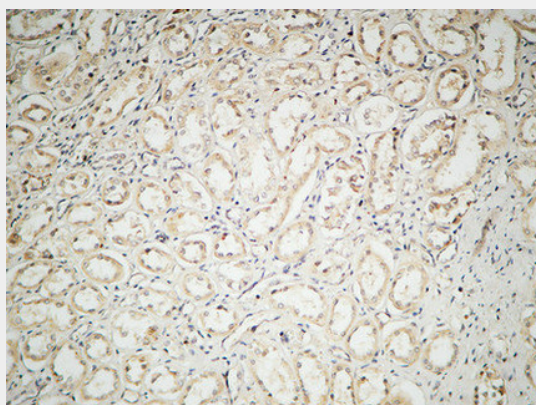
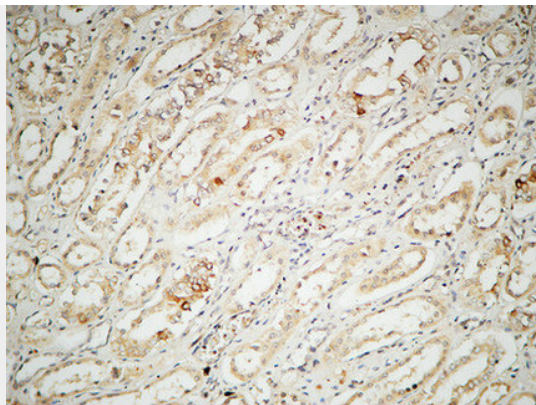
IL-2 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

IL-2 Polyclonal Antibody - Images





IL-2 Polyclonal Antibody - Background

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.