

Anti-IL-2 Antibody

Rabbit polyclonal antibody to IL-2

Catalog # AP59927

Product Information

Application	WB
Primary Accession	P60568
Other Accession	P04351
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17628

Additional Information

Gene ID	3558
Other Names	Interleukin-2; IL-2; T-cell growth factor; TCGF; Aldesleukin
Target/Specificity	Recognizes endogenous levels of IL-2 protein.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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: 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: 16293754 , PubMed: 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: 7973659). In turn, JAK1 and JAK3 phosphorylate the receptor to form a docking site leading to the phosphorylation of several substrates including STAT5 (PubMed: 8580378). This process leads to activation of several pathways including STAT, phosphoinositide-3-kinase/PI3K and mitogen-activated protein kinase/MAPK pathways (PubMed: 25142963). Functions as a T-cell growth factor and can increase NK-cell cytolytic activity as well (PubMed: 6608729). Promotes strong

proliferation of activated B-cells and subsequently immunoglobulin production (PubMed:[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.

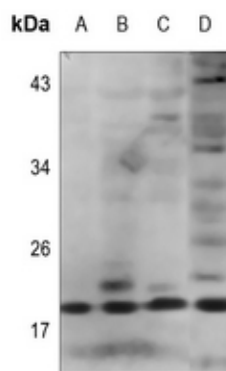
Cellular Location

Secreted.

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human IL-2. The exact sequence is proprietary.

Images



Western blot analysis of IL-2 expression in HEK293T (A), Hela (B), H446 (C), mouse liver (D) whole cell lysates.

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