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# Anti-IL-2 Antibody

Rabbit polyclonal antibody to IL-2 Catalog # AP59927

#### **Product Information**

ApplicationWBPrimary AccessionP60568Other AccessionP04351

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 KLH-conjugated synthetic peptide encompassing a sequence within the center

region of human IL-2. The exact sequence is proprietary.

**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:<u>6608729</u>). Promotes strong proliferation of activated B-cells and subsequently immunoglobulin production (PubMed:<u>6438535</u>). 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.

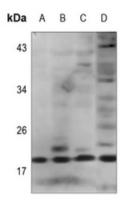
**Cellular Location** 

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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.