

Polyclonal Antibody to Interleukin 2 (IL2)

Interleukin 2

Catalog # AP74547

Product Information

Application	WB
Primary Accession	P05016
Host	Rabbit
Clonality	Polyclonal
Calculated MW	17628

Additional Information

Gene ID	280822
Other Names	TCGF; Lymphokine; T-Cell Growth Factor; Aldesleukin
Target/Specificity	Bos taurus; Bovine (Cattle)
Dilution	WB~~Western blotting: 0.5-2 μ g/mL; Immunohistochemistry: 5-20 μ g/mL; Immunocytochemistry: 5-20 μ g/mL; Optimal working dilutions must be determined by end user.
Format	0.01M PBS, pH7.4, containing 0.05% Proclin-300, 50% glycerol.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	IL2
Synonyms	IL-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. 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. 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. 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.

Images

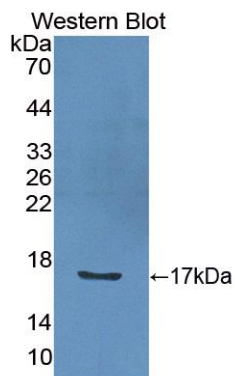


Figure. Western Blot; Sample: Recombinant IL2, Bovine.

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