

Anti-IL-2 Antibody

Catalog # ABO10785

Product Information

Application	WB
Primary Accession	P04351
Host	Rabbit
Reactivity	Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Interleukin-2(IL2) detection. Tested with WB in Mouse.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	16183
Other Names	Interleukin-2, IL-2, T-cell growth factor, TCGF, IL2, IL-2
Calculated MW	19400
Application Details	Western blot, 0.1-0.5 µg/ml, Mouse
Subcellular Localization	Secreted.
Source	Eukaryota
Protein Name	Interleukin-2(IL-2)
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of mouse IL-2(151-169aa DFLRRWIAFCQSIISTSPQ).
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After reconstitution, at 4 °C for one month. It can also be aliquotted and stored frozen at -20 °C for a longer time. Avoid repeated freezing and thawing.

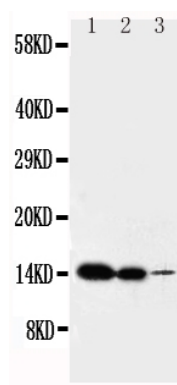
Protein Information

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 (PubMed: 14614860 , PubMed: 9814585). 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 (PubMed: 14614860 , PubMed: 27018889). 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 (PubMed: 14614860). Moreover, participates in the differentiation and homeostasis of effector T-cell subsets, including Th1, Th2, Th17 as well as memory CD8-positive T-cells (PubMed: 9814585).
Cellular Location	Secreted.
Tissue Location	Produced by immune cells including dendritic cells. In contrast, macrophages do not produce IL2 upon bacterial stimulation

Background

IL-2, Interleukin-2, formerly referred to as T-cell growth factor, is a powerfully immunoregulatory lymphokine that is produced by lectin-or antigen-activated T cells. In situ hybridization, the IL-2 gene is assigned to 4q26-q28. IL2 can act as a growth hormone for both B and T lymphocytes. It is useful in the study of the molecular nature of T-cell differentiation and, like interferons, augments natural killer cell activity.

Images



Anti-IL-2 antibody, ABO10785, Western blotting
Lane 1:
Recombinant Mouse IL-2 Protein 10ng
Lane 2:
Recombinant Mouse IL-2 Protein 5ng
Lane 3:
Recombinant Mouse IL-2 Protein 2.5ng

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