

# Anti-IL-2 Antibody

Catalog # ABO11738

## Product Information

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|--------------------------|------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB                                                                                       |
| <b>Primary Accession</b> | <a href="#">P17108</a>                                                                   |
| <b>Host</b>              | Rabbit                                                                                   |
| <b>Reactivity</b>        | Rat                                                                                      |
| <b>Clonality</b>         | Polyclonal                                                                               |
| <b>Format</b>            | Lyophilized                                                                              |
| <b>Description</b>       | Rabbit IgG polyclonal antibody for Interleukin-2(IL-2) detection. Tested with WB in Rat. |

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

## Additional Information

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| <b>Gene ID</b>                  | 116562                                                                                                                                                                             |
| <b>Other Names</b>              | Interleukin-2, IL-2, T-cell growth factor, TCGF, IL2, IL-2                                                                                                                         |
| <b>Calculated MW</b>            | 17633                                                                                                                                                                              |
| <b>Application Details</b>      | Western blot, 0.1-0.5 µg/ml, Rat                                                                                                                                                   |
| <b>Subcellular Localization</b> | Secreted.                                                                                                                                                                          |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                          |
| <b>Protein Name</b>             | Interleukin-2                                                                                                                                                                      |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.                                                                                                                |
| <b>Immunogen</b>                | E.coli-derived rat IL-2 recombinant protein (Position: A21-Q155). Rat IL-2 shares 66% and 80% amino acid (aa) sequences identity with human and mouse IL-2, respectively.          |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                                       |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins                                                                                                                                            |
| <b>Storage</b>                  | 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

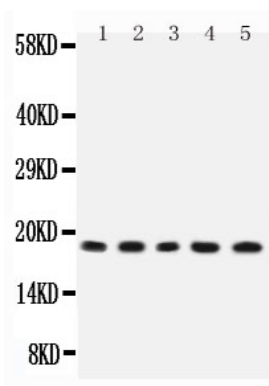
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| <b>Name</b>              | IL2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Synonyms</b>          | IL-2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Function</b>          | 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. |
| <b>Cellular Location</b> | Secreted.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Background

Interleukin-2 (IL2), formerly referred to as T-cell growth factor, is a powerfully immunoregulatory lymphokine that is produced by lectin- or antigen-activated T cells. It is produced not only by mature T lymphocytes on stimulation but also constitutively by certain T-cell lymphoma cell lines. The lymphokine interleukin-2 (IL-2) is responsible for autocrine cell cycle progression and regulation of immune responses. IL-2 expression in mature thymocytes and T cells has been found to be tightly controlled by monoallelic expression. IL-2 can act as a growth hormone for both B and T lymphocytes. This gene for interleukin 2 (IL2) is assigned to chromosome 4. IL-2 is a 15.5KDa glycoprotein, consisting of 153 amino acids in precursor form and 133 amino acids in mature form.

## Images



Anti-IL-2 Picoband antibody, ABO11738-1.jpg  
 All lanes:  
 Anti-IL-2(ABO11738) at 0.5ug/ml  
 Lane 1: Rat Thymus Tissue Lysate at 40ug  
 Lane 2: Rat Liver Tissue Lysate at 40ug  
 Lane 3: NRK Whole Cell Lysate at 40ug  
 Lane 4: PC12 Whole Cell Lysate at 40ug  
 Lane 5: RH35 Whole Cell Lysate at 40ug  
 Predicted bind size: 18KD  
 Observed bind size: 18KD

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