

Anti-IL-2 Antibody
Catalog # ABO10785**Specification**

Anti-IL-2 Antibody - 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.

Anti-IL-2 Antibody - Additional Information

Gene ID 16183

Other Names

Interleukin-2, IL-2, T-cell growth factor, TCGF, IL2, IL-2

Calculated MW

19400 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Mouse

Subcellular Localization

Secreted.

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.

Anti-IL-2 Antibody - Protein Information**Name** IL2**Synonyms** IL-2**Function**

Cytokine produced by activated CD4-positive helper T-cells and to a lesser extent activated CD8-positive T-cells and natural killer (NK) cells that plays pivotal roles in the immune response and tolerance (PubMed: [14614860](http://www.uniprot.org/citations/14614860), PubMed: [9814585](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/14614860), PubMed: [27018889](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/9814585)).

Cellular Location

Secreted.

Tissue Location

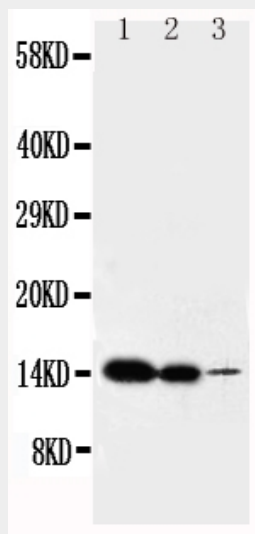
Produced by immune cells including dendritic cells. In contrast, macrophages do not produce IL2 upon bacterial stimulation

Anti-IL-2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-IL-2 Antibody - 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

Anti-IL-2 Antibody - 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.