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IL2 Antibody (Center) (Ascites)
Mouse Monoclonal Antibody (Mab)
Catalog # AM2117a

Specification

IL2 Antibody (Center) (Ascites) - Product Information

Application	**WB,E**
Primary Accession	P60568
Other Accession	NP_000577.2
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**17628**
Antigen Region	**50-77**

IL2 Antibody (Center) (Ascites) - Additional Information

Gene ID 3558

Other Names
Interleukin-2, IL-2, T-cell growth factor, TCGF, Aldesleukin, IL2

Target/Specificity
This IL2 antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 50-77 amino acids from the Central region of human IL2.

Dilution
WB~~1:100~1600
E~~Use at an assay dependent concentration.

Format
Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
IL2 Antibody (Center) (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

IL2 Antibody (Center) (Ascites) - 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:6608729). Promotes strong proliferation of activated B-cells and subsequently immunoglobulin production (PubMed:6438535). 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.

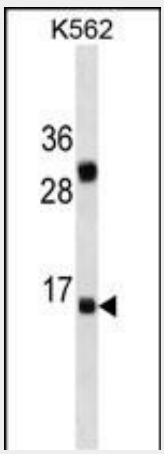
Cellular Location
Secreted.

IL2 Antibody (Center) (Ascites) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IL2 Antibody (Center) (Ascites) - Images



IL2 Antibody (Center)(Ascites)(Cat. #AM2117a) western blot analysis in K562 cell line lysates (35µg/lane).This demonstrates the IL2 antibody detected the IL2 protein (arrow).

IL2 Antibody (Center) (Ascites) - Background

The protein encoded by this gene is a secreted cytokine

that is important for the proliferation of T and B lymphocytes. The receptor of this cytokine is a heterotrimeric protein complex whose gamma chain is also shared by interleukin 4 (IL4) and interleukin 7 (IL7). The expression of this gene in mature thymocytes is monoallelic, which represents an unusual regulatory mode for controlling the precise expression of a single gene. The targeted disruption of a similar gene in mice leads to ulcerative colitis-like disease, which suggests an essential role of this gene in the immune response to antigenic stimuli.

IL2 Antibody (Center) (Ascites) - References

Zhu, P., et al. J. Immunol. 185(9):5140-5149(2010)
Muller, T., et al. Scand. J. Immunol. 72(4):365-371(2010)
Romero, R., et al. Am. J. Obstet. Gynecol. 203 (4), 361 (2010) :
Horowitz, A., et al. J. Immunol. 185(5):2808-2818(2010)
Wu, Z., et al. J Mol Cell Biol 2(4):217-222(2010)