

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

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**IL2 Antibody (Center) (Ascites) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P60568</a>
Other Accession	<a href="#">NP_000577.2</a>
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

**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.

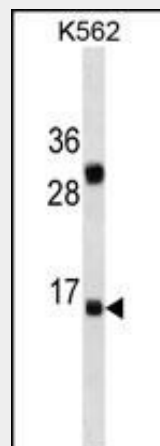
**Cellular Location**  
Secreted.

### 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 Cytometry](#)
- [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)