

## **IL-15 Antibody**

Catalog # ASC11615

# **Specification**

## **IL-15 Antibody - Product Information**

Application WB, IHC
Primary Accession
Other Accession

NP\_000576,
10835153

Reactivity Human, Mouse,

Rat

Host Rabbit Clonality Polyclonal

Isotype IgG

Calculated MW
Application Notes

18 kDa KDa
IL-15 antibody
can be used for
detection of IL-15
by Western blot
at 1 - 2 µg/mL.

### **IL-15 Antibody - Additional Information**

Gene ID **3600** 

**Target/Specificity** 

IL15; At least two isoforms of IL-15 are known to exist.

### **Reconstitution & Storage**

IL-15 antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

### **Precautions**

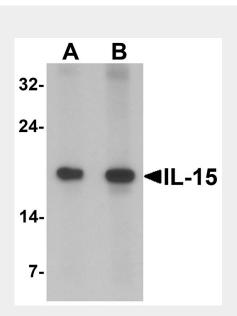
IL-15 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## **IL-15 Antibody - Protein Information**

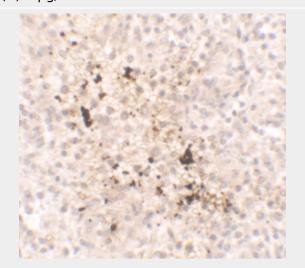
#### Name IL15

### **Function**

Cytokine that stimulates the proliferation of T-lymphocytes (PubMed:<a href="http://www.uniprot.org/citations/8178155" target="\_blank">8178155</a>). Stimulation by IL15 requires interaction of IL15 with components of the IL2 receptor,



Western blot analysis of IL-15 in rat spleen tissue lysate with IL-15 antibody at (A) 1 and (B) 2  $\mu$ g/mL



Immunohistochemistry of IL-15 in spleen tissue with IL-15 antibody at 2.5 µg/ml.

## IL-15 Antibody - Background

IL-15 Antibody: Interleukin 15 (IL-15) is a cytokine that regulates T and natural killer cell activation and proliferation. This cytokine and IL-2 share many biological activities as both have been found to bind common





including IL2RB and probably IL2RG but not IL2RA (PubMed:<a href="http://www.uniprot.org/citations/8178155" target="\_blank">8178155</a>). In neutrophils, stimulates phagocytosis probably by signaling through the IL15 receptor, composed of the subunits IL15RA, IL2RB and IL2RG, which results in kinase SYK activation (PubMed:<a href="http://www.uniprot.org/citations/15123770" target="blank">15123770</a>).

Cellular Location
[Isoform IL15-S48AA]: Secreted.

# **Tissue Location**

Most abundant in placenta and skeletal muscle. It is also detected in the heart, lung, liver and kidney. IL15-S21AA is preferentially expressed in tissues such as testis and thymus

# **IL-15 Antibody - Protocols**

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

- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

hematopoietin receptor subunits, and may compete for the same receptor, and thus negatively regulate each other's activity. The number of CD8+ memory cells is shown to be controlled by a balance between IL-15 and IL-2. This cytokine induces the activation of JAK kinases, as well as the phosphorylation and activation of transcription activators STAT3, STAT5, and STAT6. In mouse, studies suggest that IL-15 may increase the expression of apoptosis inhibitor Bcl-xL, possibly through the transcription activation activity of STAT6, and thus prevent apoptosis.

# **IL-15 Antibody - References**

Bodnar A, Nizsaloczki E, Mocsar G, et al. A biophysical approach to IL-2 and IL-15 receptor function: localization, conformation and interactions. Immunol. Lett. 2008; 116:117-25. Ku CC, Murakami M, Sakamoto A, et al. Control of homeostasis of CD8+ memory T cells by opposing cytokines. Science 2000; 288:675-8. Waldmann T, Tagaya Y, and Bamford R. Interleukin-2, interleukin-15, and their receptors. Int. Rev. Immunol. 1998; 16:205-26. Masuda A, Matsuguchi T, Yamaki K, et al. Interleukin-15 prevents mouse mast cell apoptosis through STAT6-mediate Bcl-xL expression. J. Biol. Chem. 2001; 276:26107-13.