

## Datasheet for ABIN116111

# anti-IL-15 antibody



#### Overview

| Quantity:    | 50 μg   |
|--------------|---|
| Target:      | IL-15 (IL15)  |
| Reactivity:  | Human   |
| Host:        | Rabbit  |
| Clonality:   | Polyclonal  |
| Conjugate:   | This IL-15 antibody is un-conjugated  |
| Application: | Western Blotting (WB), Enzyme Immunoassay (EIA), Functional Studies (Func), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)) |

## **Product Details**

| Immunogen:    | Highly pure 8>98%) recombinant human Interleukin 15. |
|---------------|--|
| Specificity:  | This antibody reacts with human Interleukin-15.      |
| Purification: | Affinity chromatography.                             |

## **Target Details**

| Target:           | IL-15 (IL15)   |
|-------------------|--|
| Alternative Name: | Interleukin-15 / IL15 (IL15 Products)  |
| Background:       | IL15 (114 amino acids) is a cytokine that regulates T and natural killer cell activation and proliferation. It has a predicted molecular mass of approximately 12.5 kDa. Human IL15 shares |
|                   | approximately 97 % and 73 % amino acid sequence identity with simian and mouse IL15,   |
|                   | respectively. Both human and simian IL15 are active on mouse cells. IL15 was initially isolated  |

from the simian kidney epithelial cell line CV1/EBNA. It has also been isolated from mouse and human cell sources. The cytokines IL15 and IL2 share many biological properties and stimulatory activities (T, B, and NK cells). Both IL15 and IL2 stimulate mouse CTLL2 cells. In activated peripheral blood T lymphocytes, IL2 is highly expressed but the expression of IL15 is not detectable. There is no sequence homology between IL15 and IL2, though computer modeling indicates both possess a four alpha helical bundle structure. IL15 competes for binding sites with IL2, as both IL2 and IL15 stimulate the growth of cells through the IL2 receptor. IL15 mRNA is expressed in many cell types and tissues including adherent peripheral blood mononuclear cells, fibroblasts, and epithelial cells, monocytes, placenta, and skeletal muscle. IL-15 (14-15 kD) is a member of the four alpha-helical bundle family of cytokines. It is very similar to IL-2, except that IL-15 has an IL-15 alpha receptor subunit. IL-15 plays an important role in the growth and differentiation of T and B lymphocytes, natural killer cells, macrophages, and monocytes as well as activation of a number of important intracellular signaling molecules. This implies that IL-15 could be essential for the immune responses, allograft rejection, and the pathogenesis of autoimmune diseases. Synonyms: IL-15

| Gene ID:        | 3600  |
|-----------------|---|
| NCBI Accession: | NP_000576   |
| UniProt:        | P40933  |
| Pathways:       | JAK-STAT Signaling, Glycosaminoglycan Metabolic Process |

#### **Application Details**

| Application Notes: | Neutralisation: To yield one-half maximal inhibition [ND50] of the biological activity ofhIL-15             |
|--------------------|---|
|                    | (1.0 ng/mL), a concentration of 0.15 - 0.20 $\mu$ g/mL of this antibody is required. Western blot: To       |
|                    | detect hIL-15 by Western Blot analysis this antibody can be used at a<br>concentration of 0.1 - 0.2 $\upmu$ |
|                    | g/mL. Used in conjunction with compatible secondary reagentsthe detection limit for                         |
|                    | recombinant hIL-15 is 1.5 - 3.0 ng/lane, under either reducing or   |

Restrictions: For Research Use only

#### Handling

| Reconstitution: | Restore in sterile water to a concentration of 0.1-1.0 mg/mL. |
|-----------------|---|
| Buffer:         | PBS, pH 7.2 without preservatives.                            |
| Preservative:   | Without preservative  |

## Handling

| Handling Advice: | Avoid repeated freezing and thawing. Centrifuge vial prior to opening!                             |
|------------------|--|
| Storage:         | 4 °C/-20 °C  |
| Storage Comment: | Store the antibody prior to reconstitution at -20 °C. Following reconstitution the antibody can be |
|                  | stored at 2-8 °C for one month or at -20 °C for longer.  |