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## **OriGene Technologies GmbH**

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PP1035B2	Polyclonal Antibody to Interleukin-15 / IL15 - Biotin
Alternate names:	IL-15
Quantity:	50 µg
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.
Uniprot ID:	<u>P40933</u>
NCBI:	<u>NP_000576.1</u>
GenelD:	3600
Host:	Rabbit
Immunogen:	Highly pure (> 98%) E.Coli derived recombinant Human IL-15 ( <i>CatNo</i> PA088).
Format:	<ul> <li>State: Lyophilized purified Ig fraction.</li> <li>Purification: Affinity Chromatography</li> <li>Buffer System: PBS, pH 7.2 without preservatives.</li> <li>Label: Biotin</li> <li>Reconstitution: Restore in sterile PBS containing 0.1% BSA to a concentration of 0.1-1.0 mg/ml.</li> </ul>
Applications:	<b>Direct ELISA:</b> To detect hIL-15 by Direct ELISA (using 100 $\mu$ l/well antibody solution) this antibody can be used at a concentration of 0.25-1.0 $\mu$ g/ml. Used in conjunction with compatible secondary reagents, allows the detection of at least 0.2 ng/well of recombinant hIL-15. <b>Sandwich ELISA:</b> To detect hIL-15 by Sandwich FLISA (using 100 $\mu$ l/well antibody

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	solution) a concentration of 0.25–1.0 $\mu$ g/ml of this antibody is required. This Biotinylated polyclonal antibody, in conjunction with purified Anti-Human IL-15 (CatNo PP1035P) as a capture antibody, allows the detection of at least 0.2-0.4 ng/well of recombinant hIL-15. <b>Western Blot:</b> To detect hIL-15 by Western Blot analysis this antibody can be used at a concentration of 0.1-0.2 $\mu$ g/ml. Used in conjunction with compatible secondary reagents the detection limit for recombinant hIL-15 is 1.5-3.0 ng/lane, under either <i>reducing</i> or <i>non-reducing conditions</i> . Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	This antibody reacts with Human Interleukin-15. Other species not tested.
Add. Information:	Centrifuge vial prior to opening!
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
Pictures:	Direct ELISA using Interleukin-15 / IL15 Antibody Cat,No PP1035B

Sandwich ELISA using Interleukin-15 / IL15 Antibody Cat,.-No PP1035B



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