



Polyclonal Anti-human IL-4^{HuXp} Antibody

Specifications

| | |
|------------------|------------|
| Species | Rabbit |
| Source | Human cell |
| Pack Size | 100 µg |
| IsoType | Total IgG |
| Storage | -20°C |

Product Description

Rabbit polyclonal anti-human IL-4 antibody was raised against recombinant human IL-4 expressed in human cell (rhIL-4^{HuXp}). HumanZyme's human cell expression system has the advantage of tag-free expression and purification, correct folding, accurate tertiary and quaternary structure and authentic post-translational modifications such as glycosylation, phosphorylation, palmitoylation and disulfide bonds. These post-translational modifications are absent in non-human cell expression system and have important implications for cytokine stability, receptor interaction and in vivo efficacy. Total IgG was purified using Protein A affinity chromatography.

Formulation

Lyophilized from 0.2µm filtered solution in PBS.

Reconstitution

Reconstitute with sterile PBS or H₂O. The concentration of antibody will be 1 mg/mL when resuspended in 0.1 mL PBS or H₂O.

Limited Use and Restrictions

Unless otherwise stated in our catalog or other company documentation accompanying the product, products sold by HumanZyme Inc. are intended for research use only and are not to be used for any other purpose, which includes but is not limited to, unauthorized commercial uses, including resale or use in manufacture, in vitro diagnostic uses, ex vivo or in vivo therapeutic uses or any type of consumption or application to humans or animals. For a complete statement of this Limited Use License and its application to drug discovery and diagnostic research please visit www.humanzyme.com

Certificate of Analysis

Polyclonal Anti-human IL-4^{HuXp} Antibody

Cat #: HZ-5004

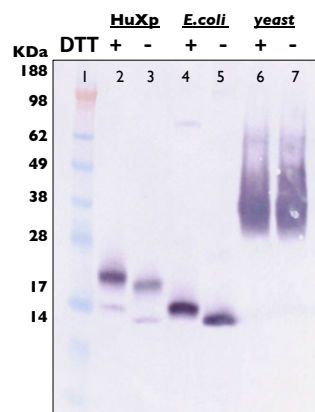
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Background

Interleukin 4 (IL-4) is produced by a number of hematopoietic cell types such as Th2 cells, NK-T, CD3⁺ cells, as well as basophils, eosinophils, and mast cells. Human IL-4 is synthesized as a precursor protein, which includes a hydrophobic signal sequence that is cleaved upon secretion from the cell. IL-4 plays an important role in several B- and T-cell activation pathways such as differentiation and proliferation. It helps antigen presentation on B cells by increasing expression of class II MHC. IL-4 is also involved in isotype switching of immunoglobulins. IL-4 can also enhance the secretion and cell surface expression of IgE and IgG1 on B-cells. IL-4 inhibits the production of inflammatory cytokines such as TNF-alpha, IL-1. It prevents the growth of some cancers. Biological activity of IL-4 is dependent on the formation of three disulfide bridges.

Applications

Western Blot - This antibody can be used at 1 to 5µg/mL with the appropriate secondary reagents to detect human IL-4. The detection limit for rhIL-4 is approximately 10 ng/lane under reducing and non-reducing conditions.



The Western Blot shows 100ng of IL-4 from three different expression systems: HuXpTM (lane 2,3) E.coli (lane 4,5) yeast (lane 6,7). Antibody concentration is 1µg/mL.