

Product: Rabbit anti-Guinea Pig IL-4 antibody

Catalog Number: 500012

Clone ID: RA0045

Antibody Clonality: Monoclonal

Host Species: Rabbit

Immunogen:

Production Method: Recombinant antibody expressed in HEK293 cells and purified with Protein A affinity chromatography.

Lot Number: As specified on each product

Size: 100 ug. Other sizes available upon request.

Concentration and Buffer: 0.5mg/ml in PBS, pH 7.4 unless otherwise stated.

Preservative: None unless specified.

Storage: 4°C. For long term storage (over two months), freeze in aliquots at -20 °C and avoid multiple freeze-thaw cycles.

Country of Origin: USA

Note: For *in vitro* research use only. Not for diagnostic or therapeutic use.

Description:

IL-4 is a cytokine primarily produced by activated T cells, mast cells, basophils and eosinophils [1]. It is functionally closely related to IL-13, and shows pleiotropic activities on B lymphocytes, monocytes, dendritic cells and fibroblasts [2]. Its main functions are inducing the differentiation of helper Th2 cells and driving the B cell immunoglobulin class switch to IgG1 and IgE. It regulates multiple aspects of allergic inflammation [3].

Recommended Usage:

For ELISA and Western Blot, 0.1ug/ml to 0.5ug/ml of rabbit monoclonal antibody is a good starting point. Optimal concentration of antibodies should be tested under individual experiment conditions.

References:

- [1] S. P. Gadani, J. C. Cronk, G. T. Norris, and J. Kipnis, "IL-4 in the Brain: A Cytokine To Remember," *J. Immunol.*, vol. 189, no. 9, pp. 4213–4219, Nov. 2012, doi: 10.4049/jimmunol.1202246.
- [2] P. Chomarat and J. Banchereau, "Interleukin-4 and Interleukin-13: Their Similarities and Discrepancies," *Int. Rev. Immunol.*, vol. 17, no. 1–4, pp. 1–52, Jan. 1998, doi: 10.3109/08830189809084486.
- [3] I. S. Junttila, "Tuning the Cytokine Responses: An Update on Interleukin (IL)-4 and IL-13 Receptor Complexes," *Front. Immunol.*, vol. 9, p. 888, Jun. 2018, doi: 10.3389/fimmu.2018.00888.