3050 Spruce Street, St. Louis, MO 63103 USA
Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757
email: techservice@sial.com sigma-aldrich.com

Product Information

Monoclonal Anti-Interleukin-4
Clone 3010
produced in mouse, purified immunoglobulin

Catalog Number **I7159**

Product Description

Monoclonal Anti-Interleukin-4 (IL-4) is purified from a hybridoma produced by the fusion of mouse myeloma cells and B cells from a mouse immunized with purified, E. coli-derived rhIL-4 (GeneID 3565). The antibody is purified by Protein G affinity chromatography.

Monoclonal Anti-Interleukin-4 (IL-4) recognizes human interleukin-4. Applications include immunoblotting and ELISA.

Interleukin-4 is a multifunctional lymphokine, which interacts with cells of multilineages including T cells, B cells, thymocytes, hematopoietic cells, and fibroblasts.[1,2] IL-4 was first described as stimulating B-lymphocyte proliferation in the presence of anti-IgM antibodies.[3] It was then shown that IL-4 could induce the expression of molecules of the class II MHC in resting B cells.[4,5] Synonyms for IL-4 include: B cell stimulatory factor-1 (BSF-1), T cell growth factor-2 (TCGF-2), and mast cell growth factor-2 (MCGF-2).[6-8] Interleukin-4 is a complex glycoprotein released by a subset of activated T cells. The molecular weight of interleukin-4 occurring naturally is 12-20 kDa.

Reagent

Supplied lyophilized from a 0.2 μm filtered solution of phosphate buffered saline with 5% trehalose.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

To one vial of lyophilized powder, add 1 mL of 0.2 µm filtered PBS to produce a 0.5 mg/mL stock solution. If aseptic technique is used, no further filtration should be needed for use in cell culture environments.

Storage/Stability

Prior to reconstitution, store at –20 °C. The reconstituted product may be stored at 2-8 °C for up to one month. For extended storage, freeze in working aliquots at –20 °C. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended.

Product Profile

Immunoblotting: a working concentration of 1-2 μg/mL is recommended. The detection limit for recombinant human IL-4 is ~50 ng/lane under non-reducing and reducing conditions, using a colorimetric system.

ELISA capture: a working concentration of 4 μg/mL is recommended as the coating concentration. Recombinant protein standard should be titrated to establish a suitable standard curve. A two-fold dilution series starting at 2 ng/mL is suggested.

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

Endotoxin: < 0.1 EU/μg antibody as determined by the LAL method.

References

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