

Anti-Mouse IL-4 Antibody, Clone 11B11

Rat monoclonal antibody against mouse IL-4, unconjugated

Catalog #100-1621

100 µg

0.5 mg/mL

Product Description

This monoclonal antibody reacts with mouse interleukin-4 (IL-4), a 14 kDa cytokine that is expressed by Th2-biased CD4⁺ T cells, mast cells, basophils, and eosinophils. IL-4 is a lymphoid cell growth factor and signals through the IL-4 receptor alpha chain (IL-4R α) upon binding. This causes the stimulation of activated B and T lymphocytes as well as the differentiation of B cells into plasma cells. IL-4 has the capability to attach and transmit signals through three different cell surface receptors; CD124, CD124 in combination with the common gamma chain (type I complex), or CD124 combined with CD213a1 (type II complex). Signal transducer and activator of transcription 6 (STAT6) has been shown to play an important role in mediating the immune regulatory signal of IL-4. IL-4 has been shown to play a role in normal wound healing and the development of allergic inflammation and asthma.

Target Antigen:	IL-4
Alternative Names:	B cell growth factor 1, B cell IgG differentiation factor, B cell stimulatory factor 1 (BSF-1), IGG1 induction factor, interleukin-4, lymphocyte stimulatory factor 1
Gene ID:	16189
Species Reactivity:	Mouse
Host Species:	Rat
Clonality:	Monoclonal
Clone:	11B11
Isotype:	IgG1, kappa
Immunogen:	Partially purified mouse IL-4
Conjugate:	Unconjugated

Applications

Verified Applications: FC

Reported Applications: FC, ICC, IHC-F

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; FCXM: Flow cytometric crossmatch assay; FISH: Fluorescence in situ hybridization; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-F: Immunohistochemistry (frozen-tissue); IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; NMR: Nuclear magnetic resonance spectroscopy; RIA: Radioimmunoassay; WB: Western blotting

Properties

Product Formulation: Phosphate-buffered saline, pH 7.2, containing 0.09% sodium azide

Purification: The antibody was purified by affinity chromatography.

Stability and Storage: Product stable at 2 - 8°C when stored undiluted. Do not freeze. Stable until expiry date (EXP) on label.

Directions for Use: For flow cytometry, the suggested use of this antibody is $\leq 1 \mu\text{g}$ per 1×10^6 cells in 100 μL . It is recommended that the antibody be titrated for optimal performance for each application.

Related Products

For a complete list of antibodies, including other conjugates, sizes, and clones, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/antibodies, or contact us at techsupport@stemcell.com.

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