

# Anti-Human IL-4 Antibody, Clone MP4-25D2, APC

Rat monoclonal antibody against human IL-4, APC-conjugated

Catalog #100-1453

100 Tests

5  $\mu$ L/test

## Product Description

This rat monoclonal antibody (clone MP4-25D2) reacts with human interleukin 4 (IL-4). IL-4 is an ~15 kDa protein primarily composed of a four-helix bundle and is produced by a host of immune cells including T helper 2 (Th2) cells, basophils, eosinophils, and mast cells. It exhibits high affinity for the IL-4 receptor alpha (IL-4R $\alpha$ ) chain, which dimerizes with either the common gamma chain ( $\gamma$ c) or IL-13 receptor alpha 1 (IL-13R $\alpha$ 1), leading to activation of downstream JAK-STAT signaling. IL-4 is involved in the differentiation of CD4+ T lymphocytes into Th2 cells, class switching of B cells to IgE, and activation of M2 macrophages with IL-13 via an alternative pathway. MP4-25D2 is a neutralizing antibody and is suitable for the detection of intracellular IL-4 by flow cytometry.

<b>Target Antigen:</b>	IL-4
<b>Alternative Names:</b>	B cell stimulatory factor 1, BCDF, BCGF, BSF-1, interleukin-4
<b>Gene ID:</b>	3565
<b>Species Reactivity:</b>	Human
<b>Host Species:</b>	Rat
<b>Clonality:</b>	Monoclonal
<b>Clone:</b>	MP4-25D2
<b>Isotype:</b>	IgG1, kappa
<b>Immunogen:</b>	Purified recombinant human IL-4
<b>Conjugate:</b>	APC (Allophycocyanin)

## Applications

Verified Applications: FC

Reported Applications: FC

Abbreviations: CellSep: Cell separation; ChIP: Chromatin immunoprecipitation; FA: Functional assay; FACS: Fluorescence-activated cell sorting; FC: Flow cytometry; ICC: Immunocytochemistry; IF: Immunofluorescence microscopy; IHC: Immunohistochemistry; IHC-P: Immunohistochemistry (paraffin-embedded); IP: Immunoprecipitation; RIA: Radioimmunoassay; WB: Western blotting

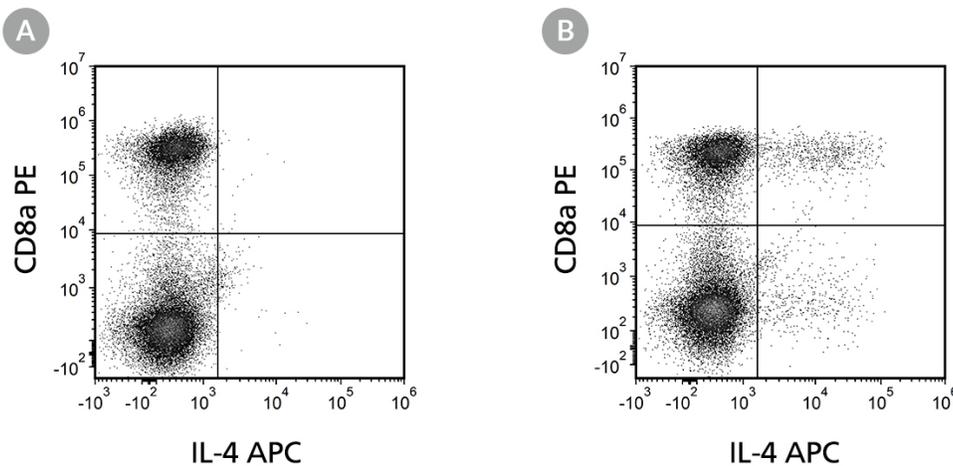
## Properties

**Purification:** The antibody was purified by affinity chromatography and conjugated with APC under optimal conditions. The solution is free of unconjugated APC.

**Stability and Storage:** Product stable at 2 - 8°C when stored undiluted. Do not freeze. Protect product from prolonged exposure to light. Stable until expiry date (EXP) on label.

**Directions for Use:** For flow cytometry, the suggested use of this antibody is 5  $\mu\text{L}$  per  $1 \times 10^6$  cells in 100  $\mu\text{L}$ . It is recommended that the antibody be titrated for optimal performance for each application.

## Data



**Figure 1. Flow Cytometry Analysis of Unstimulated and Stimulated Human T Cells Labeled With Anti-Human IL-4 Antibody, Clone MP4-25D2, APC**

(A) Flow cytometry analysis of unstimulated human T cells labeled with anti-human IL-4 Antibody, Clone MP4-25D2, APC and anti-human CD8a antibody, clone RPA-T8, PE (Catalog #60022PE). (B) Flow cytometry analysis of PMA/ionomycin-stimulated human T cells labeled with anti-human IL-4 Antibody, Clone MP4-25D2, APC and anti-human CD8a antibody, clone RPA-T8, PE (Catalog #60022PE).

## 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](http://www.stemcell.com/antibodies), or contact us at [techsupport@stemcell.com](mailto:techsupport@stemcell.com).

## References

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