

TECHNICAL DATA SHEET

# In Vivo Ready™ Anti-Mouse IL-4 (11B11)

Catalog Number: 40-7041

## PRODUCT INFORMATION

**Contents:** In Vivo Ready™ Anti-Mouse IL-4 (11B11)

**Isotype:** Rat IgG1, kappa

**Concentration:** 2 mg/mL

**Clone:** 11B11

**Reactivity:** Mouse

**Formulation:** 10 mM NaH<sub>2</sub>PO<sub>4</sub>, 150 mM NaCl, pH7.2

**Endotoxin Level:** Less than or equal to 0.01 EU/ug, as determined by the LaL assay

## DESCRIPTION

The 11B11 antibody binds to mouse Interleukin-4 (IL-4), a 14 kDa cytokine that is largely secreted by activated T cells of the Th2 subset, and to some degree by NKT and mast cells. This cytokine acts as a stimulatory factor for B cells, inducing their proliferation and differentiation, as well as playing a role in immunoglobulin class-switching. IL-4 may also provide autocrine stimulation for T cells, and affect the function of antigen presenting cells such as macrophages and dendritic cells. IL-4 can bind and signal via three cell surface receptor types: CD124 by itself, CD124 in combination with the common gamma chain (type I complex), or CD124 combined with CD213a1 (type II complex). The 11B11 antibody is widely used for detection of intracellular levels of IL-4 protein by flow cytometry, as well as for analysis of soluble cytokine as measured by ELISA, and in functional assays to neutralization cytokine-receptor interactions.

## PREPARATION & STORAGE

This monoclonal antibody preparation was purified from tissue culture supernatant via affinity chromatography. For In Vivo Ready™ (IVR) products, each preparation is also evaluated for endotoxin levels using the LAL assay. It is recommended to store the product undiluted at 4°C. Do not freeze.

## APPLICATION NOTES

This purified format is guaranteed to be >90% pure as determined by SDS-PAGE analysis. Citations are provided as a convenience to you - please consult Materials and Methods sections for additional details about the use of any product in these publications.

## REFERENCES

Cook PC, Jones LH, Jenkins SJ, Wynn TA, Allen JE, and MacDonald AS. 2012. Proc. Natl. Acad. Sci. 109: 9977-9982. (in vivo blocking) Altin JA, Goodnow CC, and Cook MC. 2012. J. Immunol. 5478-5488. (flow cytometry) Tofukuji S, Kuwahara M, Suzuki J, Ohara O, Nakayama T, and Yamashita M. 2012. J. Immunol. 188: 4846-4857. (in vitro Th1 polarization) Weber KS, Hildner K, Murphy KM and Allen PM. 2010 J. Immunol. 185: 2836-2846 (in vitro Th1 polarization, ELISA) Odobasic D, Kitching AR, Semple TJ, Timoshanko JR, Tipping PG, and Holdsworth SR. 2005. J. Am. Soc. Nephrol. 16: 2012-2022. (in vivo activation, immunofluorescence microscopy – frozen tissue, immunohistochemistry – frozen tissue)

NOTE: Please choose the appropriate format for each application. Citations are provided as a convenience to you; please consult Materials and Methods sections for additional details about the use of any product in these publications.

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