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# Anti-Mouse IL-4 (Clone 11B11) Purified *in vivo* PLATINUM<sup>™</sup> Functional Grade Monoclonal Antibody

# **Product Information**

Product No.:	I-2070
Clone:	11B11
RRID:	AB_2893832
Isotype:	Rat IgG1 к
Storage:	Sterile 2-8°C

# **Product Description**

#### Specificity:

Clone 11B11 recognizes an epitope on mouse IL-4.

#### Antigen Distribution:

IL-4 is secreted by Th2 cells, NKT cells, mast cells, eosinophils, and basophils.

#### Background:

IL-4 antibody, 11B11, recognizes mouse IL-4, also known as B-cell differentiation factor (BCDF) and B-cell stimulatory factor (BSF1). IL-4 is a pleiotropic 20 kDa cytokine secreted by T helper 2 cells (Th2) cells, natural killer T (NKT) cells, mast cells, eosinophils, and basophils<sup>1,2</sup>. IL-4 signaling through the IL-4 receptor alpha chain (IL-4Ra) induces the differentiation of naive T cells to Th2 cells<sup>3,4</sup> and stimulates B cell differentiation, proliferation, and class switching to IgG1 and IgE isotypes<sup>5</sup>. In addition, IL-4 is implicated in normal wound healing<sup>6,7</sup> and airway inflammation in patients with asthma<sup>8</sup>.

# Known Reactivity Species:

Mouse

Format:

Purified in vivo Functional Grade, in vivo PLATINUM™

# Immunogen:

Purified Recombinant Mouse IL-4

#### Formulation

This monoclonal antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

#### Purity

≥98% monomer by analytical SEC, >95% by SDS Page

#### Endotoxin

 $\leq$  0.5 EU/mg as determined by the LAL method

#### Storage and Stability

Functional grade preclinical antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at  $\leq$  -70°C. Avoid Repeated Freeze Thaw Cycles.

#### **Product Preparation**

Functional grade preclinical antibodies are manufactured in an animal free facility using *in vitro* cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.

Products are for research use only. Not for use in diagnostic or therapeutic procedures.

# **Product Datasheet**

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# **Pathogen Testing**

To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of Leinco's Purified Functional PLATINUM<sup>™</sup> antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

# Applications

# Applications and Recommended Usage (Quality Tested By Leinco):

**ELISA**This antibody is useful as the capture antibody in a sandwich ELISA. The suggested coating concentration is 0.5-2.0  $\mu$ g/ml. Titration of the reagent is recommended for optimal performance for each application.

#### Other Applications Reported in Literature:

N IHC ICC IP CyTOF® FA Country of Origin USA References 1. Yoshimoto T & Paul WE. (1994) J Exp Med. 179(4):1285–95 2. Kipnis J., at al. (2012) J Immunol. 189(9):4213-4219

3. Groth B., et al. (1992) J Exp Med. 176:1091–8

4. Murphy KM., et al. (1992) Proc Natl Acad Sci USA. 89:6065-9

5. Paul WE., et al. (1999) Annual Rev Immunol. 17:701-38



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