# **Technical Data Sheet**

# Purified Rat Anti-Mouse IL-4

#### **Product Information**

 Material Number:
 554434

 Size:
 0.5 mg

 Concentration:
 0.5 mg/ml

 Clone:
 11B11

Immunogen: Partially Purified Mouse IL-4

Isotype: Rat IgG1

Reactivity: QC Testing: Mouse

Storage Buffer: Aqueous buffered solution containing ≤0.09% sodium azide.

#### Description

The 11B11 antibody reacts with mouse interleukin-4 (IL-4). The immunogen used to generate the 11B11 hybridoma was partially purified mouse IL-4 from PMA-stimulated EL-4 supernatant. This is a neutralizing antibody.

This antibody is routinely tested by ELISA. Other application were tested at BD Biosciences Pharmingen during antibody development only or reported in the literature.

# **Preparation and Storage**

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at 4° C.

## **Application Notes**

#### Application

ELISA Capture	Routinely Tested
Western blot	Tested During Development
Intracellular staining (flow cytometry)	Tested During Development

#### **Recommended Assay Procedure:**

1. ELISA Capture: The purified 11B11 antibody (Cat. No. 554434) is useful as a capture antibody for a sandwich ELISA for measuring mouse IL-4 protein levels. Purified 11B11 antibody can be paired with the biotinylated BVD6-24G2 antibody (Cat. No. 554390) as the detection antibody, with recombinant mouse IL-4 (Cat. No. 550067) as the standard. Purified 11B11 antibody should be titrated 1-4 μg/ml to determine optimal concentration for ELISA capture. To obtain linear standard curves, doubling dilutions of mouse IL-4 ranging from ~2,000 to 15 pg/ml are recommended for inclusion in each ELISA plate. For specific methodology, please visit our web site, www.bdbiosciences.com, and go to the protocols section or the chapter on ELISA in the Immune Function Handbook.

*Note:* This ELISA pair is recommended primarily for measuring cytokine from experimental cell culture systems. These ELISA reagents are not recommended for assaying serum or plasma samples. For measuring mouse IL-4 in serum or plasma our BD OptEIA™ mouse IL-4 set (Cat. No. 555232) is specially formulated and recommended.

Note: This ELISA pair shows no cross-reactivity with any of the cytokines tested (e.g., mouse IL-1 $\beta$ , IL-2, IL-3, IL-5, IL-6, IL-7, IL-9, IL-10, IL-12 p70, IL-15, GM-CSF, IFN- $\gamma$ , MCP-1, TCA-3, TNF; human IL-1 $\alpha$ , IL-1 $\beta$ , IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-9, IL-10, IL-11, IL-12 p70, IL-12 p40, IL-13, IL-15, G-CSF, GM-CSF, IFN- $\gamma$ , lymphotactin, MCP-1, MCP-2, MIP-1 $\alpha$ , MIP-1 $\beta$ , NT-3, PDGF-AA, sCD23, SCF, TNF, LT- $\alpha$ , VEGF; rat IL-2, IL-4, IL-6, IL-10, GM-CSF, IFN- $\gamma$ , TNF).

- 2. Neutralization: The NA/LETM 11B11 antibody (Cat. 554432) is useful for neutralization of mouse IL-4 bioactivity.
- **3. WB:** The 11B11 antibody has been reported to be useful for Western blotting. Please note that this application is not routinely tested at BD Biosciences Pharmingen.

#### BD Biosciences

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### **Suggested Companion Products**

Catalog Number	Name	Size	Clone
555232	Mouse IL-4 ELISA Set	each	(none)
550067	Recombinant mouse IL-4	10 μg	(none)
554390	Biotin Rat Anti-Mouse IL-4	0.5 mg	BVD6-24G2

## **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before
  discarding to avoid accumulation of potentially explosive deposits in plumbing.

#### References

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Haak-Frendscho M, Brown JF, Iizawa Y, Wagner RD, Czuprynski CJ. Administration of anti-IL-4 monoclonal antibody 11B11 increases the resistance of mice to Listeria monocytogenes infection. *J Immunol.* 1992; 148(12):3978-3985.(Clone-specific: Neutralization)

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