

**Attention:** Use of this product constitutes an agreement to Bio X Cell's Terms and Conditions which are included with this product in print and can also be found at <https://bioxcell.com/terms-and-conditions>.

### Lot Specific Information

Lot Number: Lot Specific\*  
Volume: Lot Specific\*  
Concentration: Lot Specific\* (generally 4 to 11 mg/ml) \*  
Total Protein: Lot Specific\*

\*This information will be noted on the certificate of analysis that ships with this product.

### Product Information

Catalog Number: BE0045  
Clone: 11B11  
Isotype: Rat IgG1,  $\kappa$   
Recommended Isotype Control(s): InVivoMAb rat IgG1 isotype control, anti-horseradish peroxidase  
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer  
Immunogen: Partially purified native mouse IL-4  
Reported Applications: *in vivo* IL-4 neutralization  
*in vitro* IL-4 neutralization  
*in vivo* IL-4 receptor stimulation (as a complex with IL-4)  
Flow cytometry  
Western blot  
Formulation: PBS, pH 7.0  
Contains no stabilizers or preservatives  
Endotoxin: <2EU/mg (<0.002EU/ $\mu$ g)  
Determined by LAL gel clotting assay  
Purity: >95%  
Determined by SDS-PAGE  
Sterility: 0.2  $\mu$ m filtration  
Production: Purified from cell culture supernatant in an animal-free facility  
Purification: Protein G  
RRID: [AB\\_1107707](https://ebi.ac.uk/ols/ontologies/ab/term/AB_1107707)  
Molecular Weight: 150 kDa

### Description

The 11B11 monoclonal antibody reacts with mouse IL-4 (interleukin-4) a multifunctional 14 kDa cytokine. IL-4 is expressed primarily by activated Th2 cells and NK cells, and at lower levels by mast cells, and basophils. IL-4 signals through the IL-4R $\alpha$ . Upon receptor binding IL-4 stimulates activated B and T lymphocyte proliferation, and the differentiation of B cells into plasma cells. It also induces B cell class switching to IgE, and up-regulates MHC class II production while decreasing the production of Th1 cells, macrophages, IFN $\gamma$ , and dendritic cell IL-12. Like other Th2 associated cytokines, IL-4 is involved in the airway inflammation observed in the lungs of patients with allergic asthma. The 11B11 monoclonal antibody has been shown to neutralize the bioactivity of natural or recombinant IL-4.

### Storage

Store at the stock concentration at 4°C . **Do not freeze.**

It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <https://bioxcell.com/faqs>.

## Protocol Information

Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

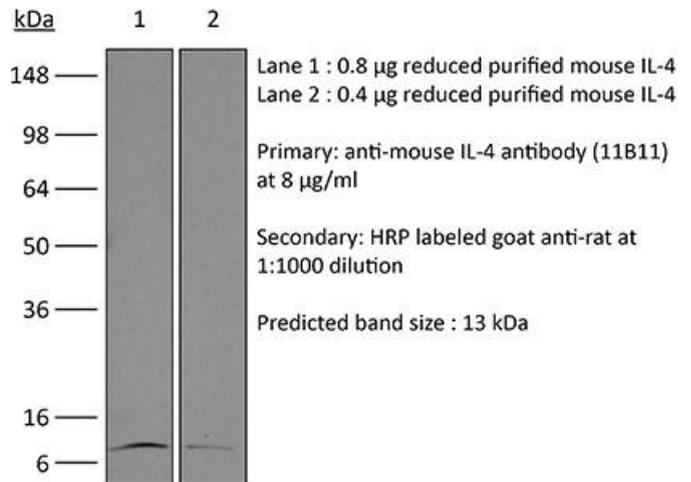
## Application References

For a complete list of references, visit [https://bioxcell.com/be0045?bxcs=9k1b3a#tab\\_references](https://bioxcell.com/be0045?bxcs=9k1b3a#tab_references) or scan the QR code below.



## Binding Validation

Validation data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, e-mail [technicalservice@bioxcell.com](mailto:technicalservice@bioxcell.com).



**Bio X Cell, LLC**  
<https://bioxcell.com>  
+1-866-787-3444  
[customerservice@bioxcell.com](mailto:customerservice@bioxcell.com)

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*Not for resale.*

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