

**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: **BE0419**  
Clone: **OX-81**  
Isotype: Mouse IgG1,  $\kappa$   
Recommended Isotype Control(s): InVivoMAb mouse IgG1 isotype control, unknown specificity  
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer  
Immunogen: Recombinant rat IL-4  
Reported Applications: *in vivo* IL-4 neutralization  
ELISA  
Flow cytometry  
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:  
Molecular Weight: 150 kDa

### Description

The OX-81 monoclonal antibody reacts with rat 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 OX-81 antibody has been shown to neutralize the bioactivity of rat 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/be0419?bxcs=9k1b3a#tab\\_references](https://bioxcell.com/be0419?bxcs=9k1b3a#tab_references) or scan the QR code below.



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*Conditions: For research use only. Not for use in diagnostic or therapeutic procedures.*

*Not for resale.*

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