

# Technical Data Sheet

## InVivoPlus anti-mouse CD4



**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:** BP0003-3  
**Clone:** YTS 177  
**Isotype:** Rat IgG2a  
**Recommended Isotype Control(s):** InVivoPlus rat IgG2a isotype control, anti-trinitrophenol  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Immunogen:** Mouse Spleen Cells  
**Reported Applications:** *in vivo* blockade of CD4+ T-cell responses  
Western blot  
**Formulation:** PBS, pH 7.0  
Contains no stabilizers or preservatives  
**Endotoxin:** ≤0.5EU/mg (≤0.0005EU/μg)  
Determined by LAL gel clotting assay  
**Purity:** ≥95%  
Determined by SDS-PAGE  
**Sterility:** 0.2 μm filtration  
**Production:** Purified from cell culture supernatant in an animal-free facility  
**Purification:** Protein G  
**Aggregation:** <5%  
Determined by SEC  
**RRID:** [AB\\_1107642](https://rrid.info/AB_1107642)  
**Molecular Weight:** 150 kDa

### Murine Pathogen Test Results

Mouse Norovirus: Negative, Mouse Parvovirus: Negative, Mouse Minute Virus: Negative, Mouse Hepatitis Virus: Negative, Reovirus Screen: Negative, Lymphocytic Choriomeningitis virus: Negative, Lactate Dehydrogenase-Elevating Virus: Negative, Mouse Rotavirus: Negative, Theiler's Murine Encephalomyelitis: Negative, Ectromelia/Mousepox Virus: Negative, Hantavirus: Negative, Polyoma Virus: Negative, Mouse Adenovirus: Negative, Sendai Virus: Negative, Mycoplasma Pulmonis: Negative, Pneumonia Virus of Mice: Negative, Mouse Cytomegalovirus: Negative, K Virus: Negative

### Description

The YTS 177 monoclonal antibody reacts with the mouse CD4. The CD4 antigen is a 55 kDa cell surface type I membrane glycoprotein belonging to the immunoglobulin superfamily. CD4 acts as a co-receptor which in cooperation with the T cell receptor (TCR) interacts with class II MHC molecules displayed by antigen presenting cells (APC). CD4 is expressed by the majority of thymocytes, most helper T cells, a subset of NK-T cells and weakly by dendritic cells and macrophages. CD4 plays an important role in the development of T cells and is required for mature T cells to function optimally. The YTS 177 antibody has been shown to compete with clones GK1.5 and YTS 191 for CD4 binding. Additionally, the YTS 177 antibody has been reported to be non-depleting but binding does induce rapid internalization of CD4 on both CD4+ Foxp3- T cells and Foxp3+ regulatory T cells. Further, the YTS 177 clone has been shown to suppress or even prevent allograft rejection,

allergic reactions and autoimmune responses.

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.

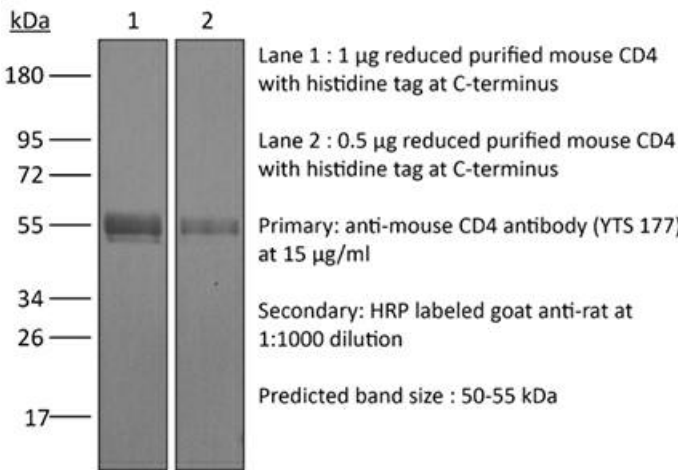
Application References

For a complete list of references, visit [https://bioxcell.com/bp0003-3?bxcs=9k1b3a#tab\\_references](https://bioxcell.com/bp0003-3?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).



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