Technical Data Sheet

InVivoMAb anti-rat 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:	**BE0439**
Clone:	**W3/25**
Isotype:	Mouse IgG1, κ
Recommended Isotype Control(s):	InVivoMAb rat IgG2b isotype control, anti-keyhole limpet hemocyanin
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Reported Applications:	*in vivo* down-regulation of surface CD4 *in vitro* neutralization of CD4 Flow cytometry Immunohistochemistry (paraffin) Immunohistochemistry (frozen)
Formulation:	PBS, pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	<2EU/mg (<0.002EU/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
RRID:	
Molecular Weight:	150 kDa

Description

The W3/25 monoclonal antibody reacts with rat CD4. CD4 is a 55 kDa type I membrane glycoprotein from the immunoglobulin superfamily, and as a cell surface receptor protein, it acts as a co-receptor (with TCR) for class II MHC molecules displayed by antigen-presenting cells (APC). CD4 is expressed by the majority of thymocytes, 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 the optimal functioning of mature T cells. The clone W3/25 is used as a “helper T-cell marker." The clone W3/25 is a nondepleting monoclonal antibody, but it has been shown to neutralize CD4 in vitro. Several in vitro studies also showed that the W3/25 monoclonal antibody inhibits CD4+ T cell activation by downregulating the CD4 molecule on the surface of lymphocytes. The W3/25 monoclonal antibody also inhibits antigen-induced T cell proliferation and IL2 production in MLR experiments. In prophylactic and experimental therapeutic in vivo investigations, this antibody has been extensively used to modulate disease-related and mechanistic parameters in experimental allergic encephalomyelitis (EAE), adjuvant arthritis, etc.

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

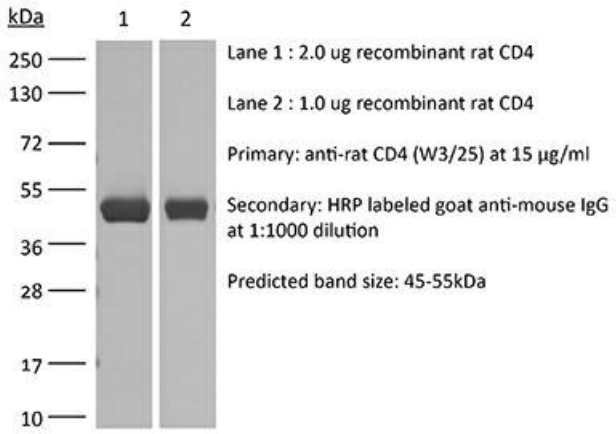
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/be0439?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.



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