

# Technical Data Sheet

## RecombiMAb anti-mouse CD28



**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:** CP042  
**Clone:** D665-CP042  
**Isotype:** Mouse IgG2a,  $\kappa$   
**Recommended Isotype Control(s):** InVivoPlus mouse IgG2a isotype control, unknown specificity  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Immunogen:** A20 cells expressing mouse CD28 and a recombinant mouse CD28-Ig fusion protein  
**Reported Applications:** *in vivo* T cell stimulation/activation\*  
*in vitro* T cell stimulation/activation\*  
\*Reported for the original mouse IgG1 D665 antibody  
**Formulation:** PBS, pH 7.0  
Contains no stabilizers or preservatives  
**Endotoxin:** <1EU/mg (<0.001EU/ $\mu$ g)  
Determined by LAL gel clotting assay  
**Purity:** >95%  
Determined by SDS-PAGE  
**Sterility:** 0.2  $\mu$ m filtration  
**Production:** Purified from HEK293 cell supernatant in an animal-free facility  
**Purification:** Protein G  
**Aggregation:** <5%  
Determined by SEC  
**RRID:**  
**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 D665-CP042 monoclonal antibody is a chimeric version of the original D665 antibody. The variable domain sequences are identical to the original D665 but the constant region sequences have been switched from mouse IgG1 to mouse IgG2a. The D665-CP042 antibody contains no Fc mutations just as the original mouse IgG1 antibody does not. The D665-CP042 monoclonal antibody reacts with mouse CD28, a 45 kDa costimulatory receptor and a member of the Ig superfamily. CD28

is expressed by thymocytes, most peripheral T cells, and NK cells. CD28 is a receptor for CD80 (B7-1) and CD86 (B7-2). Signaling through CD28 induces IL-2 and IL-2 receptor expression and T cell proliferation. The D665 antibody is a CD28 superagonist and is most commonly used to induce the expansion of Treg cells in vivo in various mouse models of disease.

## 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.

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### Bio X Cell, LLC

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*Not for resale.*

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