

# Technical Data Sheet

## InVivoMAb anti-rat 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:** BE0418  
**Clone:** JJ316  
**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:** Rat CD28-transfected BALB/c mouse A2OJ cell line  
**Reported Applications:** *in vivo* T cell stimulation/activation  
**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 filtered  
**Production:** Purified from cell culture supernatant in an animal-free facility  
**Purification:** Protein G  
**RRID:**  
**Molecular Weight:** 150 kDa

### Description

The JJ316 monoclonal antibody reacts with rat 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 augments IL-2 and IL-2 receptor expression as well as cytotoxicity of CD3-activated T cells. In contrast to JJ319 which is a "conventional" CD28-specific Mab that costimulates anti-TCR-triggered proliferation *in vitro*, JJ316 is a CD28 "superagonistic" antibody that induces polyclonal T cell proliferation *in vitro* and *in vivo* and does not require TCR ligation.

### 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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*Not for resale.*

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