

# Technical Data Sheet

InVivoMAb anti-mouse/human phosphorylated PD-1 (CD279)



**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:** BE0387  
**Clone:** 407.6G12  
**Isotype:** Mouse IgG2a,  $\kappa$   
**Recommended Isotype Control(s):** InVivoMAb mouse IgG2a isotype control, unknown specificity  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Immunogen:** Human PD-1 p248Tyr peptide conjugated to KLH  
**Reported Applications:** Western Blot  
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 A  
**RRID:**  
**Molecular Weight:** 150 kDa

## Description

The 407.6G12 monoclonal antibody reacts with phosphorylated mouse PD-1. Specifically, the antibody only reacts with PD-1 when tyrosine 248 (Y248) is phosphorylated. PD-1 is a 50-55 kDa cell surface receptor that belongs to the CD28 family of the Ig superfamily. PD-1 is transiently expressed on CD4 and CD8 thymocytes as well as activated T and B lymphocytes and myeloid cells. PD-1 expression declines after successful elimination of antigen. PD-1 signals via binding its two ligands, PD-L1 and PD-L2. Upon ligand binding, PD-1 signaling inhibits T-cell activation, leading to reduced proliferation, cytokine production, and T-cell death. Phosphorylation of Y248 of the ITSM motif of PD-1 is essential for the initiation of inhibitory signals. PD-1 blockade leads to reduced phosphor-PD-1. The 6G12 antibody can be used to assess the efficacy of PD-1 pathway blockade.

## 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.

---

**Bio X Cell, LLC**

<https://bioxcell.com>

+1-866-787-3444

[customerservice@bioxcell.com](mailto:customerservice@bioxcell.com)

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

*Not for resale.*

**Bio X Cell, Bio X Cell logo, and all other trademarks are the property of Bio X Cell, LLC © 2024 Bio X Cell, LLC**