

# Technical Data Sheet



## Bispecific anti-mouse PD-1 x anti-mouse PD-L1 (LALA-PG)

**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:** CPB510  
**Clone:** Derived from clones RMP1-14 and 10F.9G2  
**Isotype:** mouse IgG2a (LALA-PG)-scFv,  $\kappa$   
**Recommended Isotype Control(s):** Bispecific mouse IgG2a (LALA-PG)-scFv, kappa isotype control  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Mutations:** LALA-PG  
**Reported Applications:** ELISA  
For information on in-vivo applications, please contact [technicalservice@bioxcell.com](mailto:technicalservice@bioxcell.com)  
**Formulation:** PBS, pH 7.0  
Contains no stabilizers or preservatives  
**Endotoxin:**  $\leq 0.5\text{EU/mg}$  ( $\leq 0.0005\text{EU}/\mu\text{g}$ )  
Determined by LAL assay  
**Purity:**  $\geq 95\%$   
Determined by SDS-PAGE  
**Sterility:**  $0.2\ \mu\text{m}$  filtration  
**Production:** Purified from mammalian cell supernatant in an animal-free facility  
**Purification:** Protein G  
**RRID:**  
**Molecular Weight:** 200.1 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

CPB510 is a 2+2 symmetric tetravalent bispecific engineered to simultaneously target mouse programmed cell death protein 1 (PD-1, CD279) and mouse vascular endothelial growth factor A (PD-L1, CD274, B7-H1) proteins. CPB510 contains the murine IgG2a constant region to reduce immunogenicity and the formation of anti-drug antibodies (ADAs) in mouse models and LALA-PG Fc-silencing mutations to abolish antibody-dependent cell-mediated cytotoxicity (ADCC) and complement-dependent cytotoxicity (CDC) while minimizing Fc-driven off-target toxicity and depletion of immune cells. This bispecific was designed to concurrently target and bind to the PD-1 receptor (typically found on activated T-cells) and the PD-L1 ligand (often expressed on tumor cells). Dual binding through bispecific engagement leads to blockade of the inhibitory PD-1/PD-L1 pathway, preventing immune suppression within the tumor microenvironment and enhancing activation and proliferation of antigen-specific T lymphocytes to promote tumor cell killing.

## 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/cpb510?bxcs=9k1b3a#tab\\_references](https://bioxcell.com/cpb510?bxcs=9k1b3a#tab_references) or scan the QR code below.



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*Not for resale.*

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