

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://biocell.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, κ
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@biocell.com
Formulation: PBS, pH 7.0
Contains no stabilizers or preservatives
Endotoxin: ≤0.5EU/mg (≤0.0005EU/μg)
Determined by LAL assay
Purity: ≥95%
Determined by SDS-PAGE
Sterility: 0.2 μm filtration
Production: Purified from mammalian cell supernatant in an animal-free facility
Purification: Protein G
RRID: [https://doi.org/10.5281/zenodo.4905240](#)
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://bioboxcell.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://bioboxcell.com/cpb510?bxcs=9k1b3a#tab_references or scan the QR code below.



Bio X Cell, LLC

<https://bioboxcell.com>

+1-866-787-3444

customerservice@bioboxcell.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 © 2025 Bio X Cell, LLC