Technical Data Sheet

Bispecific anti-mouse LAG3 x anti-mouse PD-1 (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:	**CPB522**
Clone:	**derived from clones C9B7W and 29F.1A12**
Isotype:	Mouse IgG2a (LALA-PG), κ
Recommended Isotype Control(s):	Bispecific mouse IgG2a (LALA-PG), 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
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 A
RRID:	
Molecular Weight:	147.2

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

CPB522 is a 1+1 bivalent bispecific structured after Tobemstomig but engineered to simultaneously target mouse programmed cell death protein 1 (PD-1, CD279) and mouse lymphocyte-activation gene 3 (LAG3). CPB522 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 checkpoint-expressing effector T cells. This bispecific is designed to work by simultaneously blocking two non-redundant inhibitory pathways on exhausted T cells, thereby more effectively reversing dysfunction than targeting either PD-1 or LAG-3 alone. PD-1 is an inhibitory receptor on activated and chronically stimulated T cells whose engagement by PD-L1/PD-L2 dampens TCR signaling, reduces cytokine production, and promotes an exhausted phenotype in tumors. LAG-3 is a co-inhibitory receptor expressed on

exhausted CD8 T cells, Tregs, and other lymphocytes, and binding to ligands such as MHC II contributes to reduced proliferation, cytokine secretion, and cytotoxic function especially in chronic antigen exposure and in the tumor microenvironment. PD-1 and LAG-3 are often co-expressed on highly exhausted, tumor-reactive tumor infiltrating lymphocytes (TILs). Bispecifics that concurrently bind both targets can concentrate functional activity on this subset, enhancing proximal TCR signaling and restoring effector function, effectively reactivating anti-tumor activity while potentially sparing less-activated peripheral T cells.

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 ?utm_source=cr9k1b#tab_references or scan the QR code below.

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