Technical Data Sheet

InVivoSIM bispecific anti-human PD-1 x CTLA-4 (Cadonilimab Biosimilar)

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:	**SIMB0097**
Clone:	**Cadonilimab**
Isotype:	Human IgG1, κ
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Mutations:	Ala substitutions at Fc positions 235, 236, and 238
Reported Applications:	*in vivo* functional assays *in vitro* functional assays ELISA
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 cell culture supernatant in an animal-free facility
Purification:	Protein A
RRID:	
Molecular Weight:	150 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

This Cadonilimab biosimilar antibody uses the same variable regions as the therapeutic antibody Cadonilimab, making it ideal for research use. Cadonilimab is a tetravalent bispecific IgG1 antibody that simultaneously targets human PD-1 and CTLA-4, two inhibitory immune checkpoints that regulate T-cell activation, proliferation, and antitumor responses. By binding both PD-1 and CTLA-4, Cadonilimab enhances T-cell activation more efficiently than monospecific antibodies and promotes potent antitumor immunity within the tumor microenvironment. Importantly, Cadonilimab's Fc region is engineered to minimize FcγR binding and reduce toxicity, particularly immune-related adverse events commonly associated with anti-CTLA-4 therapies, while preserving strong checkpoint-blocking activity. Clinically, Cadonilimab has demonstrated efficacy in multiple cancer types, including recurrent or metastatic cervical cancer, by enhancing T-cell infiltration, reducing regulatory T-cell–mediated suppression, and amplifying antitumor immune responses. This Cadonilimab biosimilar is well suited for

studying dual checkpoint regulation, T-cell activation pathways, immune-oncology mechanisms, and the therapeutic potential of multivalent bispecific checkpoint inhibitors.

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/simb0097?bxcs=9k1b3a#tab_references or scan the QR code below.

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