Technical Data Sheet

InVivoSIM anti-human ActRIIA (ACVR2A), ActRIIB (ACVR2B) (Bimagrumab 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:	**SIM0086**
Clone:	**Bimagrumab**
Isotype:	Human IgG1, κ
Recommended Isotype Control(s):	RecombiMAb human IgG1 (LALA-PG) isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Mutations:	LALA-PG
Immunogen:	Human ActRIIA and ActRIIB
Reported Applications:	*in vivo* functional assays *in vitro* functional assays Flow cytometry ELISA
Formulation:	pH 7.0 Contains no stabilizers or preservatives
Endotoxin:	≤0.5EU/mg (≤0.0005EU/μg) Determined by LAL gel clotting 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
Aggregation:	<5% Determined by SEC
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 non-therapeutic biosimilar antibody uses the same variable regions as the therapeutic antibody Bimagrumab, making it ideal for research use. Bimagrumab is a fully human IgG1 monoclonal antibody that targets the activin type II receptors ActRIIA (ACVR2A) and ActRIIB (ACVR2B), which are members of the TGF-β receptor superfamily. ActRIIA and ActRIIB are

broadly expressed on skeletal muscle cells and other tissues, where they mediate signaling of myostatin, activins, and related ligands. These signaling pathways normally limit muscle growth and contribute to muscle wasting in a variety of pathological settings. By binding to and blocking ActRIIA/ActRIIB, Bimagrumab inhibits ligand–receptor interactions, thereby releasing the inhibitory brake on muscle growth and promoting hypertrophy. In clinical studies, Bimagrumab has been shown to increase lean body mass and muscle strength in patients with sarcopenia, cancer cachexia, and neuromuscular disorders, although its therapeutic development has focused primarily on muscle wasting diseases and metabolic disorders such as obesity and type 2 diabetes. This Bimagrumab biosimilar is well suited for investigating TGF-β family receptor signaling, muscle biology, sarcopenia, cachexia, obesity, and therapeutic approaches aimed at enhancing muscle mass and metabolic health.

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/sim0086?bxcs=9k1b3a#tab_references or scan the QR code below.

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