

# Technical Data Sheet

## InVivoSIM anti-human CGRP (Fremanezumab biosimilar)



[bioxccl.com](https://bioxccl.com)

**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://bioxccl.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

|                                        |                                                                                                  |
|----------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>Catalog Number:</b>                 | <b>SIM0120</b>                                                                                   |
| <b>Clone:</b>                          | <b>Fremanezumab</b>                                                                              |
| <b>Isotype:</b>                        | Human IgG2, $\kappa$                                                                             |
| <b>Recommended Isotype Control(s):</b> | RecombiMAb human IgG2 isotype control, anti-hen egg lysozyme                                     |
| <b>Recommended Dilution Buffer:</b>    | InVivoPure pH 7.0 Dilution Buffer                                                                |
| <b>Mutations:</b>                      | A326S/P327S                                                                                      |
| <b>Immunogen:</b>                      | Human CGRP                                                                                       |
| <b>Reported Applications:</b>          | <i>in vivo</i> functional assays<br><i>in vitro</i> functional assays<br>ELISA<br>Flow cytometry |
| <b>Formulation:</b>                    | PBS, pH 7.0<br>Contains no stabilizers or preservatives                                          |
| <b>Endotoxin:</b>                      | $\leq 0.5$ EU/mg ( $\leq 0.0005$ EU/ $\mu$ g)<br>Determined by LAL assay                         |
| <b>Purity:</b>                         | $\geq 95\%$<br>Determined by SDS-PAGE                                                            |
| <b>Sterility:</b>                      | 0.2 $\mu$ m filtration                                                                           |
| <b>Production:</b>                     | Purified from cell culture supernatant in an animal-free facility                                |
| <b>Purification:</b>                   | Protein A                                                                                        |
| <b>Aggregation:</b>                    | $< 5\%$<br>Determined by SEC                                                                     |

### 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 Fremanezumab biosimilar antibody uses the same variable regions as the therapeutic antibody Fremanezumab, making it ideal for research use. Fremanezumab is a humanized IgG2a monoclonal antibody that specifically targets calcitonin gene-related peptide (CGRP), a neuropeptide that plays a central role in migraine pathophysiology. CGRP is released from sensory neurons within the trigeminovascular system and contributes to vasodilation, neurogenic inflammation, and pain transmission associated with migraine attacks. By binding soluble CGRP with high affinity, Fremanezumab prevents its interaction with the calcitonin gene-related peptide receptor, thereby inhibiting downstream signaling involved in migraine initiation and propagation. In addition to migraine, CGRP plays important roles in nociception, vascular

homeostasis, and neurogenic inflammation, making it an important target for studying neurovascular biology. This Fremanezumab biosimilar is well suited for studying CGRP biology, neurovascular signaling, pain mechanisms, migraine pathophysiology, and for benchmarking the therapeutic antibody's target engagement and neutralizing activity in pre-clinical experimental systems.

## 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](https://bioxcell.com/?utm_source=cr9k1b#tab_references) or scan the QR code below.



---

**Bio X Cell, LLC**

<https://bioxcell.com>

+1-866-787-3444

[customerservice@bioxcell.com](mailto:customerservice@bioxcell.com)

*Conditions: For research use only. Not for human use. 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 © Bio X Cell, LLC**