

# Technical Data Sheet

## InVivoSIM anti-respiratory syncytial virus (RSV) F protein (Nirsevimab 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:** SIM0088  
**Clone:** Nirsevimab  
**Isotype:** Human IgG1,  $\kappa$   
**Recommended Isotype Control(s):** RecombiMAb human IgG1 isotype control, anti-hen egg lysozyme  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Mutations:** K214R/M252Y/S254T/T256E  
**Immunogen:** RSV F protein  
**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/ $\mu$ g)  
Determined by LAL gel clotting assay  
**Purity:** >95%  
Determined by SDS-PAGE  
**Sterility:** 0.2  $\mu$ m 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 Nirsevimab, making it ideal for research use. Nirsevimab is a human IgG1 monoclonal antibody that targets the fusion (F) glycoprotein of respiratory syncytial virus (RSV), a highly contagious virus that causes serious respiratory infections, particularly in infants

and older adults. The RSV F protein plays a critical role in viral entry by mediating the fusion of viral and host cell membranes, making it a key target for neutralization. Nirsevimab binds to a highly conserved epitope on the prefusion conformation of the RSV F protein, thereby preventing the conformational changes required for membrane fusion and subsequent infection. Unlike palivizumab, which binds both pre- and postfusion forms, Nirsevimab is specific to the prefusion form, enabling higher potency and prolonged protection. This Nirsevimab biosimilar is ideal for studying RSV entry mechanisms, neutralizing antibody responses, and RSV vaccine or therapeutic development.

## 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/sim0088?bxcs=9k1b3a#tab\\_references](https://bioxcell.com/sim0088?bxcs=9k1b3a#tab_references) or scan the QR code below.



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