

# Technical Data Sheet

## InVivoSIM anti-human integrin $\alpha 4\beta 1$ (VLA-4)



**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:** SIM0018  
**Clone:** Natalizumab  
**Isotype:** Human IgG4,  $\kappa$   
**Recommended Isotype Control(s):** InVivoMAb polyclonal human IgG  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Immunogen:** Human integrin  $\alpha 4\beta 7$   
**Reported Applications:** Functional assays  
Flow cytometry  
**Formulation:** PBS, 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 filtered  
**Purification:** Protein G  
**Aggregation:** <5%  
Determined by SEC  
**RRID:** [AB\\_2927534](https://abnova.com/AB_2927534)  
**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 from the therapeutic antibody Natalizumab making it ideal for research use. This Natalizumab biosimilar reacts with human VLA-4  $\alpha$  chain also known as CD49d and integrin alpha 4. VLA-4 is a 150 kDa glycoprotein belonging to the integrin family that is expressed by many cell types including T and B lymphocytes, monocytes, eosinophils, basophils, mast cells, thymocytes, NK cells, and dendritic cells. Integrin  $\alpha 4$  associates with integrin  $\beta 7$  to form integrin  $\alpha 4\beta 7$  also known as LPAM-1 as well as integrin  $\beta 1$  (CD29) to form integrin  $\alpha 4\beta 1$  also known as VLA-4. Integrin  $\alpha 4$  plays roles in adhesion and T cell co-stimulation. Integrin  $\alpha 4$  ligands include VCAM-1, MAdCAM-1, and fibronectin.

## 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/sim0018?bxcs=9k1b3a#tab\\_references](https://bioxcell.com/sim0018?bxcs=9k1b3a#tab_references) or scan the QR code below.



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*Not for resale.*

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