

# 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:	<1EU/mg (<0.001EU/ $\mu$ 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:	<a href="https://abnova.com/AB_2927534">AB_2927534</a>
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.

### Shelf-Life and Storage

Store at the stock concentration at 4°C. **Do not freeze.**

All Bio X Cell antibodies have a guaranteed shelf-life of one year from the date of customer receipt when stored as recommended. 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.

---

### 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 © 2023 Bio X Cell, LLC**