

# Technical Data Sheet

## InVivoSIM anti-human integrin $\alpha 4\beta 7$ (LPAM-1) (Vedolizumab Biosimilar)



[bioxcell.com](http://bioxcell.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://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 Website Link: <https://bioxcell.com/invivosim-anti-human-integrin-alpha-4-beta-7-lpam-1-vedolizumab-biosimilar-sim0024>

### Product Information

Catalog Number: SIM0024  
Clone: Vedolizumab  
Isotype: Human IgG1,  $\kappa$   
Recommended Isotype Control(s): RecombiMAb human IgG1 (LALA-PG) isotype control, anti-respiratory syncytial virus  
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer  
Mutations: L235A/G237A/E356D/M358L  
Immunogen: Human integrin  $\alpha 4\beta 7$  (LPAM-1)  
Reported Applications: Functional assays  
ELISA  
Western blot  
Formulation: PBS, pH 7.0  
Contains no stabilizers or preservatives  
Endotoxin:  $\leq 0.5$  EU/mg ( $\leq 0.0005$  EU/ $\mu$ g)  
Determined by LAL assay  
Purity:  $\geq 95\%$   
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 Vedolizumab making it

ideal for research use. This Vedolizumab biosimilar reacts with integrin  $\alpha 4\beta 7$ . The 130 kDa integrin  $\beta 7$  chain associates with the 150 kDa integrin  $\alpha 4$  (CD49d) chain to form LPAM-1, a member of the Ig superfamily. LPAM-1 is expressed by peripheral lymphocytes, small subsets of thymocytes, and bone marrow progenitors. LPAM-1 binds VCAM-1 (CD106), MAdCAM-1, and fibronectin and facilitates lymphocyte adhesion and migration to the intestine and associated lymphoid tissues. Vedolizumab binds specifically to the  $\alpha 4\beta 7$  integrin heterodimer, but not to the functionally distinct  $\alpha 4\beta 1$  or  $\alpha E\beta 7$  integrin heterodimers, thereby inhibiting the binding of  $\alpha 4\beta 7$ -expressing cells to MAdCAM-1 and fibronectin, but not to VCAM-1.

## 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/invivosim-anti-human-integrin-alpha-4-beta-7-lpam-1-vedolizumab-biosimilar-sim0024?utm\\_source=cr9k1b#tab\\_references](https://bioxcell.com/invivosim-anti-human-integrin-alpha-4-beta-7-lpam-1-vedolizumab-biosimilar-sim0024?utm_source=cr9k1b#tab_references) or scan the QR code below.



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