# **Technical Data Sheet**

## InVivoSIM anti-human TNFα (Adalimumab Biosimilar)



<u>Attention</u>: 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 <a href="https://bioxcell.com/terms-and-conditions">https://bioxcell.com/terms-and-conditions</a>.

## 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: SIM0001
Clone: Adalimumab
Isotype: Human IgG1

Recommended Isotype Control(s): RecombiMAb human IgG1 isotype control, anti-hen egg lysozyme

**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer

 Immunogen:
 Human TNFα

 Reported Applications:
 TNFα neutralization

 Flow Cytometry

**ELISA** 

Immunofluoresence Immunoprecipitation Immunohistochemistry

Western Blot

**Formulation:** PBS, pH 7.0

Contains no stabilizers or preservatives

**Endotoxin:** <1EU/mg (<0.001EU/μg)

Determined by LAL gel clotting assay

**Purity:** >95%

Determined by SDS-PAGE

Sterility: 0.2 µm filtration

**Production:** Purified from cell culture supernatant in an animal-free facility

Purification: Protein A
Aggregation: <5%

Determined by SEC

 RRID:
 AB\_2894722

 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 Adalimumab making

Bio X Cell, LLC Page 1 of 2

it ideal for research use. This Adalimumab biosimilar reacts with human TNF $\alpha$  (tumor necrosis factor-alpha) a multifunctional proinflammatory cytokine. TNF $\alpha$  belongs to the TNF superfamily of cytokines and signals through its two receptors, TNFR1 and TNFR2 which can be activated by both the soluble trimeric and membrane-bound and forms of TNF $\alpha$ . TNF $\alpha$  is primarily produced by macrophages in response to foreign antigens such as bacteria (lipopolysaccharides), viruses, and parasites as well as mitogens and other cytokines but can also be expressed by monocytes, neutrophils, NK cells, CD4 T cells and some specialized dendritic cells. TNF $\alpha$  is known to play key roles in a wide spectrum of biological processes including immunoregulation, cell proliferation, differentiation, apoptosis, antitumor activity, inflammation, anorexia, cachexia, septic shock, hematopoiesis, and viral replication. TNF $\alpha$  dysregulation has been implicated in a variety of diseases, including autoimmune diseases, insulin resistance, and cancer. Adalimumab blocks the interaction of TNF $\alpha$  with the TNFR1 (p55) and TNFR2 (p75) resulting in a down-regulation of the inflammatory response associated with autoimmune diseases.

## **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 <a href="https://bioxcell.com/faqs">https://bioxcell.com/faqs</a>.

## **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.

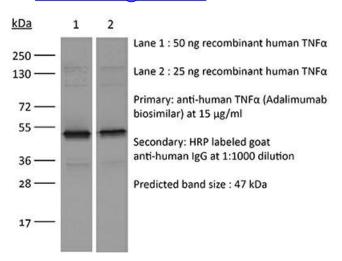
## **Application References**

For a complete list of references, visit <a href="https://bioxcell.com/catalogsearch/result/?g=SIM0001#tab">https://bioxcell.com/catalogsearch/result/?g=SIM0001#tab</a> references or scan the QR code below.



## **Binding Validation**

Validation data shown below confirms that this clone binds to its target antigen. For lot specific binding validation data, e-mail technicalservice@bioxcell.com.



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Bio X Cell, LLC Page 2 of 2