# **Technical Data Sheet**

## InVivoSIM anti-human IL-1β (Gevokizumab 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: SIM0049
Clone: Gevokizumab
Isotype: Human IgG2, κ

Recommended Isotype Control(s): RecombiMAb human IgG2 isotype control, anti-hen egg lysozyme

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

**Immunogen:** Human IL-1β

**Reported Applications:** in vivo neutralization of human IL1β

in vitro neutralization of human IL1β

ELISA Western blot Flow cytometry

**Formulation:** PBS, pH 7.0

Contains no stabilizers or preservatives

**Endotoxin:** <0.5EU/mg (<0.0005EU/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

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 biosimilar antibody uses the same variable regions as the therapeutic antibody Gevokizumab, making it ideal for research use. Gevokizumab is a fully humanized monoclonal antibody that reacts with human IL-1 $\beta$ , a potent proinflammatory cytokine produced primarily by monocytes. Inflammatory signals, such as LPS, stimulate the synthesis and promote the accumulation of cytosolic stores of pro-IL1  $\beta$ , and after inflammasome assembly-mediated CASP1 activation, pro-IL1 is processed to generate active cytokine for secretion. IL-1 $\beta$  is an important mediator of the inflammatory response

Bio X Cell, LLC Page 1 of 2

and is involved in a variety of cellular activities, including cell proliferation, differentiation, apoptosis, and T and B lymphocyte activation, neutrophil influx and activation, cytokine production, antibody production, fibroblast proliferation, and the synthesis of collagen as well as prostaglandins.  $\mathbb{L}$ -1 $\beta$  promotes Th17 differentiation of T-cells and also shows synergism with  $\mathbb{L}$ -12 to induce  $\mathbb{L}$ -1 $\beta$  epitope that is proximal to, but does not overlap with, the receptor/ligand interface, and this interaction reduces the binding of  $\mathbb{L}$ -1 to its receptor, i.e.,  $\mathbb{L}$ -1 receptor type I ( $\mathbb{L}$ -1 $\mathbb{R}$ I or CD121a). Gevokizumab neutralizes the human  $\mathbb{L}$ -1 $\beta$  by binding to it, and this antibody is used in preclinical research involving in vitro and in vivo experimental models of type 1 diabetes mellitus, inflammation, rheumatoid arthritis, cardiovascular biology, and cancer immunotherapy.

### **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/fags">https://bioxcell.com/fags</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.

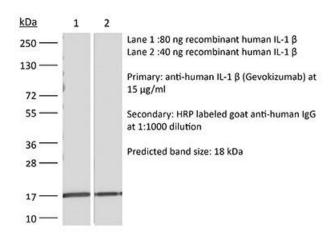
### **Application References**

For a complete list of references, visit <a href="https://bioxcell.com/sim0049?bxcs=9k1b3a#tab\_references">https://bioxcell.com/sim0049?bxcs=9k1b3a#tab\_references</a> 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.



Bio X Cell, LLC

https://bioxcell.com +1-866-787-3444 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 © 2024 Bio X Cell, LLC

Bio X Cell, LLC Page 2 of 2