# **Technical Data Sheet**

InVivoSIM anti-human VISTA (Onvatilimab 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 <u>https://bioxcell.com/terms-and-conditions</u>.

# 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:	SIM0057
Clone:	Onvatilimab
Isotype:	Human lgG1, κ
Recommended Isotype Control(s):	RecombiMAb human lgG1 isotype control, anti-hen egg lysozyme
<b>Recommended Dilution Buffer:</b>	InVivoPure pH 7.0 Dilution Buffer
Immunogen:	Human VISTA
Reported Applications:	<i>in vitro</i> blocking of VISTA signaling <i>in vivo</i> blocking of VISTA signaling Functional assays Flow cytometry ELISA
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
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, Onvatilimab, making it ideal for research use. Onvatilimab is a humanized IgG1 monoclonal antibody that reacts with V-type immunoglobulin domain-containing suppressor of T-cell activation (VISTA), also known as VSIR or B7-H5. VISTA is an immunoregulatory

receptor that inhibits the T-cell response. VISTA is also involved in the stimulation of MMP14-mediated MMP2 activation. VISTA is suggested to promote embryonic stem cell differentiation through its inhibitory effects on BMP4 signaling. VISTA is a type I transmembrane glycoprotein from the lg superfamily, and it is expressed in several myeloid cells, including CD11b monocytes, CD66b+ neutrophils, at low levels on CD4+ and CD8+ T-cells, and in a subset of NK cells. VISTA functions as a negative immune-checkpoint protein that suppresses T cell cytokine production and proliferation. VISTA is overexpressed by tumor-infiltrating lymphocytes, such as myeloid cells and regulatory T cells. In tumors, VISTA regulates T cell function, thus promoting antitumor effects. In preclinical mouse models, VISTA blockade with monoclonal antibodies decreases the MDSC infiltration in tumors with concomitant induction of immune effector infiltrates, thereby exerting positive effects on the survival of tumor-bearing mice.

#### Storage

#### Store at the stock concentration at $4\,^\circ\text{C}$ . 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.

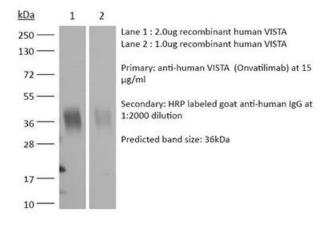
#### **Application References**

For a complete list of references, visit <u>https://bioxcell.com/sim0057?bxcs=9k1b3a#tab\_references</u> 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 <u>technicalservice@bioxcell.com</u>.



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