Technical Data Sheet

InVivoSIM anti-human 4-1BB (Urelumab Biosimilar)

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:	**SIM0058**
Clone:	**Urelumab**
Isotype:	Human IgG1, κ
Recommended Isotype Control(s):	RecombiMAb human IgG4 (S228P) isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Mutations:	S228P
Immunogen:	Human 4-1BB (CD137)
Reported Applications:	*in vivo* 4-1BB stimulation *in vitro* 4-1BB stimulation Functional assays Immunoprecipitation 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, Urelumab, making it

ideal for research use. Urelumab reacts with 4-1BB, also known as CD137 antigen, TNF receptor superfamily member 9, or induced by lymphocyte activation. Urelumab has been engineered as a humanized IgG4 monoclonal antibody to reduce its non-specific binding to Fc receptors. Urelumab has a hinge mutation, S228P, which prevents IgG4 Fab exchange, thereby improving stability. CD137 is a type 1 membrane glycoprotein receptor that belongs to the tumor necrosis factor (TNF) superfamily, and it is expressed in lymphoid tissues. Upon activation, CD137 is expressed on the surface of several immune cells, including T cells (CD4+ and CD8+), NKT cells, regulatory T cells, eosinophils, and dendritic cells. Notably, CD137 is not expressed on the surface of resting T and B cells, as well as activated B lymphocytes, rendering it an advantageous biomarker for immunological activation. CD137L is an established ligand of CD137, and the CD137-CD137L signaling pathway augments and prolongs T-cell reactivity to alloantigens. Urelumab is an agonistic antibody that replicates cross-linking by the endogenous ligand (i.e., CD137-CD137L), and this antibody triggers a robust costimulatory signal in antigen-primed T cells, enhances the ADCC of NK cells, and boosts the T cell-mediated antitumor immunity.

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

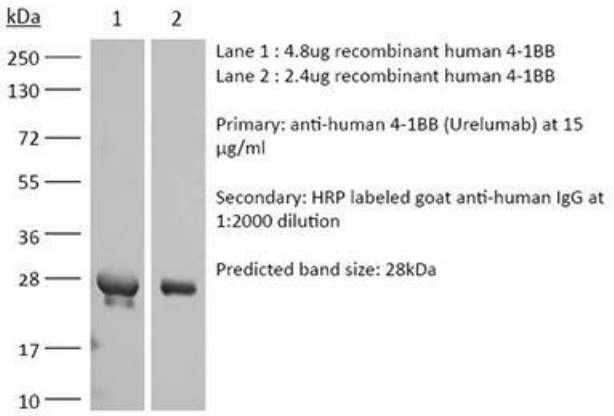
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/sim0058?bxcs=9k1b3a#tab_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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