

InVivoSIM anti-human TROP-2 (Sacituzumab 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: SIM0051
Clone: Sacituzumab
Isotype: Human IgG1, κ
Recommended Isotype Control(s): RecombiMAb human IgG1 (K214R/L234F/L235E/P331S) isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer: InVivoPure pH 7.0 Dilution Buffer
Mutations: K214R
Immunogen: Human TROP-2
Reported Applications: *in vitro* functional assays
in vivo functional assays
Antibody-drug conjugate synthesis
ELISA
Western blot
Flow cytometry
Formulation: PBS, pH 7.0
Contains no stabilizers or preservatives
Endotoxin: <0.5EU/mg (<0.0005EU/ μ g)
Determined by LAL gel clotting assay
Purity: >95%
Determined by SDS-PAGE
Sterility: 0.2 μ m 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 Sacituzumab, making it ideal for research use. Sacituzumab is a fully humanized IgG1 κ monoclonal antibody that reacts with human trophoblastic cell surface antigen 2 (TROP-2), an antigen linked to cancer. TROP-2 is a cell surface receptor that spans the cellular membrane with an

extracellular, transmembrane, and intracellular domain, along with a cytoplasmic tail essential for signaling. The ligands of TROP-2 include claudin-1, claudin-7, cyclin D1, and potentially IGF-1. TROP-2 upregulates EpCAM-triggered cell signaling and requires RIP to regulate efficient growth and division of cancer cells. Several proteins, including RIP, TACE, γ -secretase, Presenilin 1 (PS-1) and PS-2, facilitate TROP-2's cleavage within the transmembrane domain, and this cleavage produces TROP-2 extracellular domain (ECD) and intracellular domain (ICD) fragments. TROP-2 is considered a cellular marker of trophoblastic stem cells, and this glycoprotein is known to transduce calcium signals. Normal epithelial cells express TROP-2 at a low level, while many tumors (such as glioblastoma, pancreatic carcinoma, and all breast cancer subtypes, especially triple-negative breast cancer) express it at a high level. The critical role of TROP-2 in multiple signaling pathways often links to the proliferation, invasion, and metastasis of tumors. The tumor cell-specific expression of TROP-2 makes it an ideal target for cancer immunotherapy. Several recent studies have used Sacituzumab-based antibody-drug conjugates (ADC), namely Sacituzumab Govitecan (IMMU-132) that contains Sacituzumab conjugated to SN-38 (the active metabolite of irinotecan), utilizing a pH hydrolysable linker CL2A for facilitating SN-38 release to the cancer cells in in vitro and in vivo preclinical studies.

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/sim0051?bxcs=9k1b3a#tab_references or scan the QR code below.



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 © 2025 Bio X Cell, LLC