Technical Data Sheet

InVivoSIM anti-human CD19 (Loncastuximab 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:	**SIM0075**
Clone:	**Loncastuximab**
Isotype:	Human IgG1, κ
Recommended Isotype Control(s):	RecombiMAb human IgG1 isotype control, anti-hen egg lysozyme
Recommended Dilution Buffer:	InVivoPure pH 6.0T Dilution Buffer
Immunogen:	Human CD19
Reported Applications:	Antibody-drug conjugate synthesis *in vivo* functional assays *in vitro* functional assays Flow cytometry ELISA
Formulation:	PBS, pH 6.0 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, loncastuximab, making it ideal for research use. Loncastuximab is a humanized IgG1, k monoclonal antibody that reacts with the human B-cell marker CD19, a membrane glycoprotein of the immunoglobulin superfamily that is expressed at the various stages of B-cell development and is detectable in most B-cell malignancies. CD19 is an ideal target for antibody-drug conjugates (ADCs) and other therapies because it plays a key role in lymphocyte biology, is uniquely expressed on B cells, and is rapidly

internalized without shedding into the bloodstream. These properties make it especially valuable in research on B cells and relapsed or refractory diffuse large B-cell lymphoma (DLBCL), the most common form of non-Hodgkin lymphoma. Loncastuximab tesirine is a human CD19-directed ADC, wherein the antibody is conjugated through a cathepsin-cleavable linker to SG3199, a potent pyrrolobenzodiazepine dimer alkylating cytotoxin. Upon binding to CD19 on the cell membrane, the ADC is internalized and transported to lysosomes, where it is cleaved to release the drug inside the cells, ultimately inducing apoptotic cell death through the crosslinking of DNA. In vitro experiments using loncastuximab tesirine in multiple lymphoma cell lines demonstrated this ADC's strong cytotoxic activity that correlated with the level of CD19 expression. The in vivo treatment of loncastuximab tesirine is also reported to show dose-dependent antitumor activity in human CD19-expressing Burkitt lymphoma-derived Ramos models (subcutaneous as well as disseminated xenograft models involving Ramos and NALM-6 cells).

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/sim0075?bxcs=9k1b3a#tab_references or scan the QR code below.

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