Technical Data Sheet

InVivoSIM anti-human FOLR1 (Mirvetuximab 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:	**SIM0071**
Clone:	**Mirvetuximab**
Isotype:	Human IgG1, κ
Recommended Dilution Buffer:	InVivoPure pH 7.0 Dilution Buffer
Mutations:	E356D/M358L/KDel
Immunogen:	Human FOLR1
Reported Applications:	Functional assays Flow cytometry Immunohistochemistry ELISA Western blot
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 mirvetuximab, making it ideal for research use. Mirvetuximab is a chimeric human IgG1 monoclonal antibody targeting folate receptor 1 (FOLR1), also known as folate receptor α (FRα) and folate-binding protein 1 (Fbp1). FOLR1 is a glycosylphosphatidylinositol (GPI)-

anchored, high-affinity, low-throughput surface receptor for folate transport. The FOLR1-bound folate from the cell surface is brought into the cell through endocytosis. FOLR1 plays a significant role in maintaining the integrity of the genome (i.e., DNA metabolism), cell proliferation, and intracellular signaling. FOLR1's expression is generally restricted to the luminal (apical) surface of polarized epithelia, including proximal renal tubules, lung pneumocytes, uterine appendages, epididymis, bronchial glands, placental trophoblasts, and choroid plexus (a network of blood vessels and specialized cells within the ventricles of the brain). Compared to the normal tissues, the expression of FOLR1 is more prevalent in several epithelial cancers, e.g., ovarian cancer, non-small-cell lung cancer, colon cancer, etc., making it an excellent prognostic marker as well as a target for anti-cancer therapeutics. FOLR1's role is rapidly evolving in precision medicine, and the current FOLR1-targeted experimental therapeutics include small-molecule-drug conjugates, CAR-T cells, vaccines, and antibody-drug conjugates (ADCs) such as mirvetuximab soravtansine. The ADC mirvetuximab soravtansine contains a mirvetuximab antibody conjugated to the cytotoxic maytansinoid DM4 via a cleavable linker, where it binds FOLR1 on tumor cells, gets internalized, and delivers DM4 to disrupt microtubule dynamics and induce apoptosis. This mirvetuximab biosimilar is an unconjugated antibody only, and it has a great binding specificity and high affinity for human FOLR1.

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

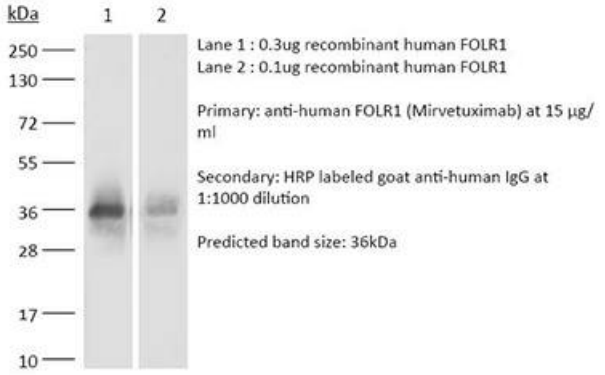
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

Application References

For a complete list of references, visit https://bioxcell.com/sim0071?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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