

# Technical Data Sheet

## InVivoSIM anti-human mesothelin (Amatuximab 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:** SIM0040  
**Clone:** Amatuximab  
**Isotype:** Human IgG1,  $\kappa$   
**Recommended Isotype Control(s):** RecombiMAb human IgG1 isotype control, anti-hen egg lysozyme  
**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer  
**Mutations:** E356D/M358L  
**Immunogen:** Human mesothelin  
**Reported Applications:** *in vivo* functional assays  
*in vitro* functional assays  
ELISA  
Western blot  
Flow cytometry  
**Formulation:** PBS, pH 7.0  
Contains no stabilizers or preservatives  
**Endotoxin:** <0.5EU/mg (<0.0005EU/ $\mu$ g)  
Determined by LAL gel clotting assay  
**Purity:** >95%  
Determined by SDS-PAGE  
**Sterility:** 0.2  $\mu$ 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 non-therapeutic biosimilar antibody uses the same variable regions as the therapeutic antibody Amatuximab, making it ideal for research use. Amatuximab is a high-affinity chimeric monoclonal antibody that reacts with mesothelin (MSLN). Human MSLN is synthesized as a 71-kDa precursor that translocates to the cell surface, where it is cleaved into 31-kDa

megakaryocyte potentiating factor (MPF) and 40-kDa mature MSLN protein. MSLN is a glycosylphosphatidyl inositol (GPI)-anchored membrane glycoprotein whose expression in adult humans is restricted to mesothelium. Notably, MSLN is found over-expressed in many epithelial cancers, such as epithelial mesotheliomas, ovarian cancers, lung adenocarcinomas, and pancreatic ductal adenocarcinomas. MSLN interacts with cancer antigen 125 (CA125), a specific epitope expressed on MUC16, and it is suggested to play a role in tumorigenesis and metastasis. The tumor-specific expression of MSLN makes it an attractive target antigen for cancer immunotherapy. Amatuximab has been shown to elicit antibody-dependent cellular cytotoxicity (ADCC) against MSLN+ cancer cell lines in vitro, and a greater efficacy in mouse tumor xenografts when combined with chemotherapy.

## 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

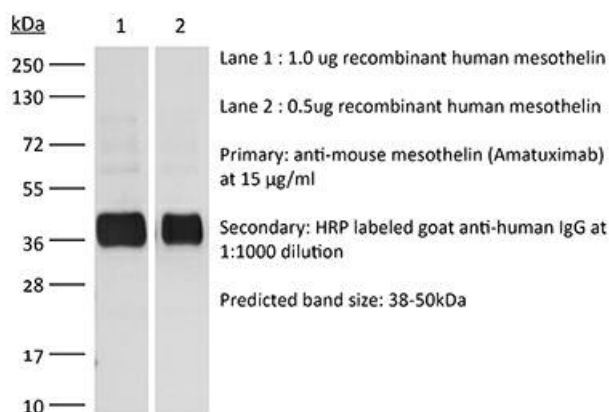
[https://bioxcell.com/sim0040?bxcs=9k1b3a#tab\\_references](https://bioxcell.com/sim0040?bxcs=9k1b3a#tab_references)

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](mailto:technicalservice@bioxcell.com).



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