# Technical Data Sheet

## InVivoSIM anti-human HER2 (Trastuzumab 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:** | **SIM0005** |
| **Clone:** | **Trastuzumab** |
| **Isotype:** | Human IgG1 |
| **Recommended Isotype Control(s):** | RecombiMAb human IgG1 isotype control, anti-hen egg lysozyme |
| **Recommended Dilution Buffer:** | InVivoPure pH 7.0 Dilution Buffer |
| **Immunogen:** | Human A431 cells over-expressing EGFR |
| **Reported Applications:** | *in vitro* HER2+ cell depletion (ADCC assay)<br>Antibody-drug conjugate synthesis<br>*in vitro* functional assays<br>*in vivo* functional assays<br>Flow Cytometry<br>ELISA<br>Immunohistochemistry<br>Western Blot |
| **Formulation:** | PBS, pH 7.0<br>Contains no stabilizers or preservatives |
| **Endotoxin:** | ≤0.5EU/mg (≤0.0005EU/µg)<br>Determined by LAL gel clotting assay |
| **Purity:** | ≥95%<br>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%<br>Determined by SEC |
| **RRID:** | AB_2894726 |
| **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 from the therapeutic antibody Trastuzumab making

it ideal for research use. This Trastuzumab biosimilar reacts with human HER2 (human epidermal growth factor receptor 2) also known as neu peptide, CD340, ErbB-2, and p185. HER2 is a 185 kDa transmembrane, receptor-like glycoprotein with intrinsic tyrosine kinase activity that is part of several cell surface receptor complexes. HER2 lacks an identified ligand however, the kinase can be activated in the absence of a ligand when overexpressed. HER2 is a proto-oncoprotein that is commonly overexpressed on a variety of different tumors. Approximately 40% of human breast cancers overexpress HER2. HER2 overexpression is associated with poorer overall survival rates, shorter times to disease progression, and increased resistance to chemotherapy. Because of these clinical characteristics anti-HER2 monoclonal antibody therapy is now a standard for the treatment of advanced breast cancers that overexpress HER2. Trastuzumab induces an immune-mediated response that triggers the internalization and downregulation of HER2. This Trastuzumab biosimilar antibody is documented for in vitro HER2+ cell depletion through antibody-dependent cell-mediated cytotoxicity (ADCC).

## 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

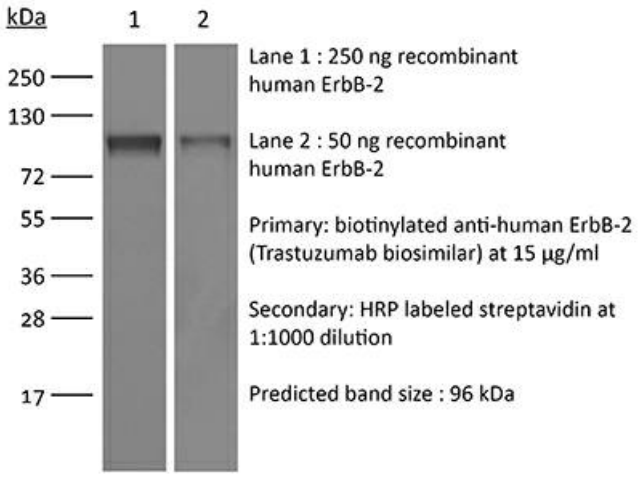
Since applications vary, each investigator should use the application references as a guide to help estimate the appropriate dose or concentration. The dose or concentration can be further optimized experimentally in a dose response or titration experiment.

## Application References

For a complete list of references, visit https://bioxcell.com/sim0005?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.




**Bio X Cell, LLC**
https://bioxcell.com
+1-866-787-3444
customerservice@bioxcell.com

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