

# Technical Data Sheet

## InVivoSIM anti-human EGFR (Cetuximab 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:** SIM0002  
**Clone:** Cetuximab  
**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 EGFR (ErbB1)  
**Reported Applications:** *in vitro* EGFR2+ cell depletion (ADCC assay)  
*in vitro* functional assay  
EGFR blockade  
*in vivo* imaging  
Immunohistochemistry (frozen)  
Immunofluorescence  
Flow Cytometry  
ELISA  
**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:** [AB\\_2894723](https://eutils.ncbi.nlm.nih.gov/entrez/eutils/rrid.cgi?db=AB_2894723)  
**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 Cetuximab making it ideal for research use. This Cetuximab biosimilar reacts with human EGFR (epidermal growth factor receptor) also known as ErbB-1. EGFR is a 170 kDa cell-surface receptor and belongs to the ErbB family of receptors. EGFR signaling is activated upon binding one of its ligands including epidermal growth factor (EGF), transforming growth factor  $\alpha$  (TGF  $\alpha$ ), Amphiregulin, and heparin binding-EGF (HB-EGF). Upon activation, EGFR transitions from an inactive monomeric form to an active homodimer. This initiates several downstream signal transduction cascades including the MAPK, Akt and JNK pathways, leading to DNA synthesis and cell proliferation. EGFR overexpression or constitutive activation are associated with many cancers. For this reason, anti-EGFR monoclonal antibody mediated immunotherapies are currently being explored as cancer treatments. Cetuximab inhibits tumor cell proliferation by blocking the interaction of EGF with EGFR.

## 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.

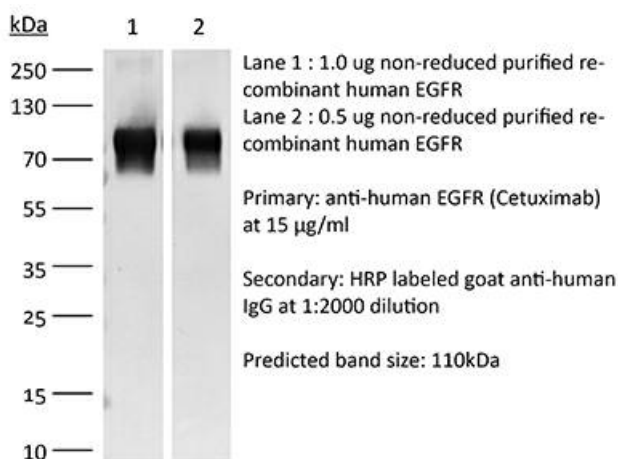
## Application References

For a complete list of references, visit [https://bioxcell.com/sim0002?bxcs=9k1b3a#tab\\_references](https://bioxcell.com/sim0002?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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*Not for resale.*

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