# **Technical Data Sheet**

## InVivoSIM anti-human RANKL (CD254) (Denosumab 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 <a href="https://bioxcell.com/terms-and-conditions">https://bioxcell.com/terms-and-conditions</a>.

### 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:** SIM0028 Clone: **Denosumab** Isotype: Human IgG1, ĸ

Recommended Isotype Control(s): RecombiMAb human IgG1 isotype control, anti-hen egg lysozyme

**Recommended Dilution Buffer:** InVivoPure pH 7.0 Dilution Buffer

Immunogen: Human RANKL **Reported Applications:** Functional assays Flow Cytometry

PBS, pH 7.0

Formulation:

Contains no stabilizers or preservatives

**Endotoxin:** <1EU/mg (<0.001EU/µg)

Determined by LAL gel clotting assay

**Purity:** 

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 from the therapeutic antibody Denosumab making it ideal for research use. This Denosumab biosimilar reacts with human RANKL (receptor activator of nuclear factor kappa-B ligand) also known as CD254 and TRANCE (TNF-related activation-induced cytokine). RANKL is a 35 kDa type II membrane protein that belongs to the TNF superfamily. RANKL is expressed on activated T lymphocytes in the lung, thymus, and lymph nodes and on osteoclasts. RANKL has been implicated in the regulation of T cell and dendritic cell interactions as well as osteoclast differentiation. Additionally, RANKL was found to be critical for osteoclast differentiation. Denosumab is

Bio X Cell, LLC Page 1 of 2 an inhibitor of RANKL which functions by decreasing the development of osteoclasts.

#### **Storage**

Store at the stock concentration at 4°C. **Do not freeze.** 

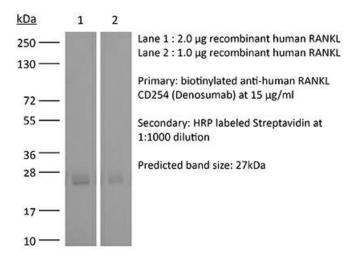
It is not uncommon for a floccule or precipitate to appear during storage. The floccule is typically buffer salts precipitating out of solution or a small bit of protein aggregation. For information on how to remove floccules or precipitates see our FAQ's at <a href="https://bioxcell.com/fags">https://bioxcell.com/fags</a>.

#### **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.

#### **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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