

Rev04
Update: Aug,21,2025**DATASHEET**

Anti-Denosumab Antibody (16F2), mAb, Mouse

Cat. No.: A02230

Overview

Specificity	The product is specific for Denosumab.
Host Species	Mouse
Immunogen	Denosumab F(ab') ₂
Conjugate	Unconjugated

Applications

Working concentrations for specific applications should be determined by the investigators. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

Application	Recommended Usage
Sandwich ELISA	Capture with A02229 and detected by A02230 Capture: 1-5 µg/ml Detection: 0.5-1 µg/ml
Competitive ELISA	1-5 µg/ml
ELISA	0.01-0.1 µg/ml

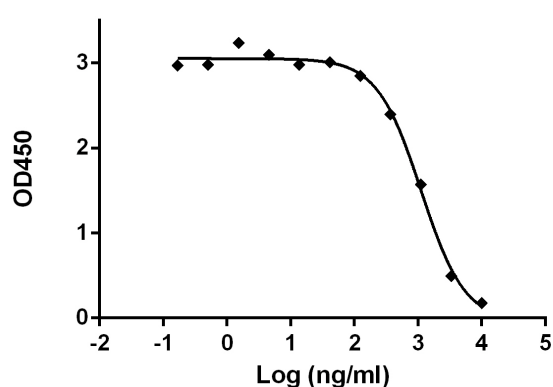
Properties

Form	Lyophilized
Storage Buffer	Lyophilized with PBS, pH 7.2, containing 0.02% sodium azide.
Reconstitution	Reconstitute the lyophilized antibody with deionized water (or equivalent) to a final concentration of 0.5 mg/mL.
Storage Instructions	The lyophilized product remains stable for 1 year at -20°C from the date of receipt. Upon reconstitution, it can be stored for 2-3 weeks at 2-8°C or for 12 months at -20°C or below. Avoid repeated freezing and thawing cycles.

Purification	Protein A affinity column
Isotype	Mouse IgG1, κ
Clonality	Monoclonal
Clone ID	16F2B12
Note	GenScript can customize this product per customer's request including product size, buffer components, etc.

Examples

Anti-Denosumab Antibody (16F2) blocks Denosumab binding with Human RANKL ligand



Anti-Denosumab Antibody (16F2), mAb, Mouse (GenScript, A02230) blocks Denosumab binding with Human RANKL recombinant protein.

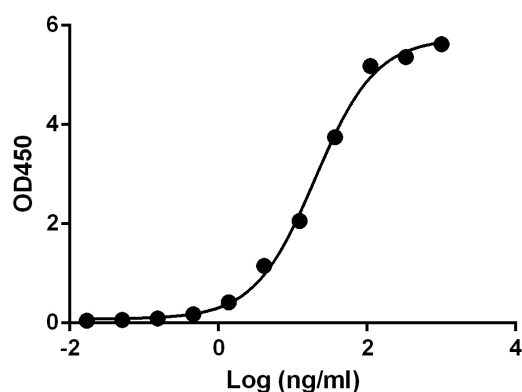
Coating antigen: Denosumab 1 μ g/ml.

RANKL final concentration: 1.2 ng/ml.

Anti-Denosumab antibody dilutions start from 10 μ g/ml.

IC₅₀ = 0.11 μ g/ml.

Anti-Denosumab Antibody (16F2) binds with Denosumab

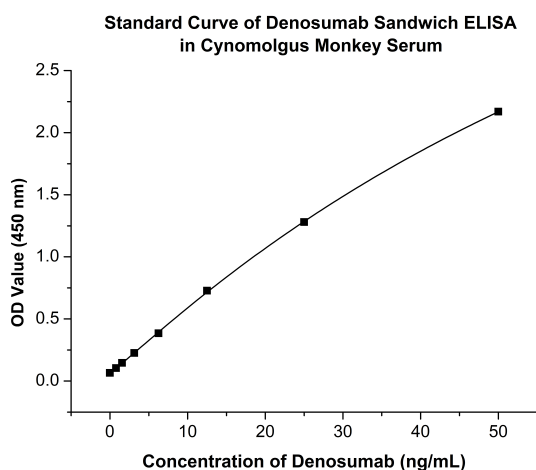


ELISA binding of Anti-Denosumab Antibody (16F2), mAb, Mouse (GenScript, A02230) with Denosumab. While the antibody does not recognize the human IgG (data not shown).

Coating antigen: Denosumab, 1 μ g/ml.

Anti-Denosumab Antibody (16F2), mAb, Mouse (GenScript, A02230) dilution start from 1,000 ng/ml.

EC₅₀ = 20.03 ng/ml.



Standard curve of Denosumab Sandwich ELISA by anti-idiotypic antibodies in cynomolgus monkey serum.

In this ELISA assay, Anti-Denosumab Antibody (3B1), mAb, Mouse (GenScript, A02229) was coated at a concentration of 1 µg/ml, and Anti-Denosumab Antibody (16F2), mAb, Mouse (GenScript, A02230) conjugated with Biotin was used as a detection antibody at a concentration of 0.5 µg/ml.

In this ELISA assay, a four-parameter logistic curve fitting program was used to create a standard curve with the R-Square equal to 0.99987. The denosumab standard was diluted with fresh cynomolgus monkey serum with a volume ratio of 1:10. The sensitivity of detecting Denosumab is up to 1.56 ng/ml.

In this ELISA assay, the OD450 values at each concentration measured in different diluted serum matrix were not significantly different from those of the dilution buffer. The signals from 10 cynomolgus monkey serum samples diluted 10 times or more approached those of the dilution buffer to set an MRD of 10 to reach a concentration within the dynamic range, without altering the assay precision or accuracy.

Background

Target Background : Denosumab with trade name Prolia, is an FDA-approved drug for the treatment of patients with osteoporosis, treatment-induced bone loss, metastases to bone, and giant cell tumor of bone. Denosumab is a fully human monoclonal antibody that works as a RANK ligand (RANKL) inhibitor. Denosumab can bind RANKL, preventing RANKL from activating RANK, its receptor on the osteoclast surface.

Synonyms : Prolia Xgeva, Prolia, AMG 162, AMG-162

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.

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