

Source

Mouse monoclonal antibody is produced from a hybridoma resulting from fusion of SP2/0 myeloma and B-lymphocytes obtained from a mouse immunized with Adalimumab F(ab')₂.

Isotype

IgG1/kappa

Specificity

Recognizes Adalimumab specifically, no cross reactivity with other humanized antibodies.

Biotinylation

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with biotins using standard chemical labeling method. A specially optimized long-spacer biotin reagent (13.5 angstroms) is used in this product to minimize potential steric hindrance.

Biotin:Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4. Normally trehalose is added as protectant before lyophilization.

Reconstitution

Please see Certificate of Analysis for specific instructions.

For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

Storage

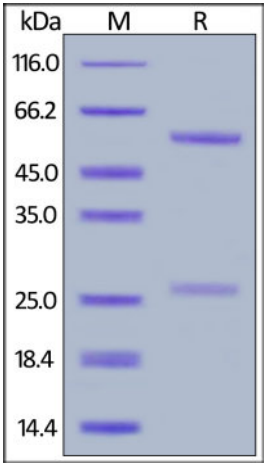
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- 4-8°C for 12 months in lyophilized state;
- -70°C for 3 years under sterile conditions after reconstitution.

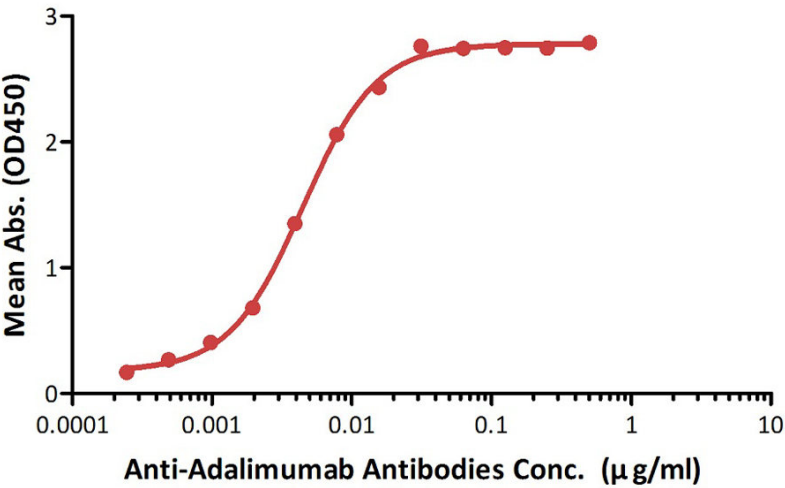
SDS-PAGE



Biotinylated Anti-Adalimumab Antibodies (recommended for PK/PD) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 90%.

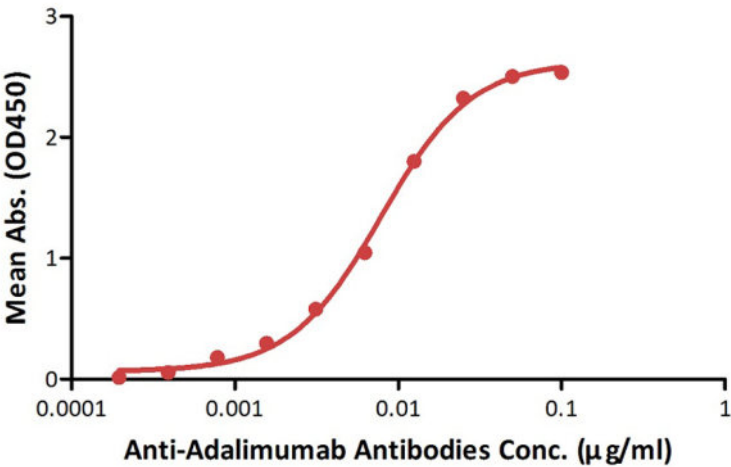
Bioactivity-ELISA

Anti-Adalimumab Antibodies—PK Assay



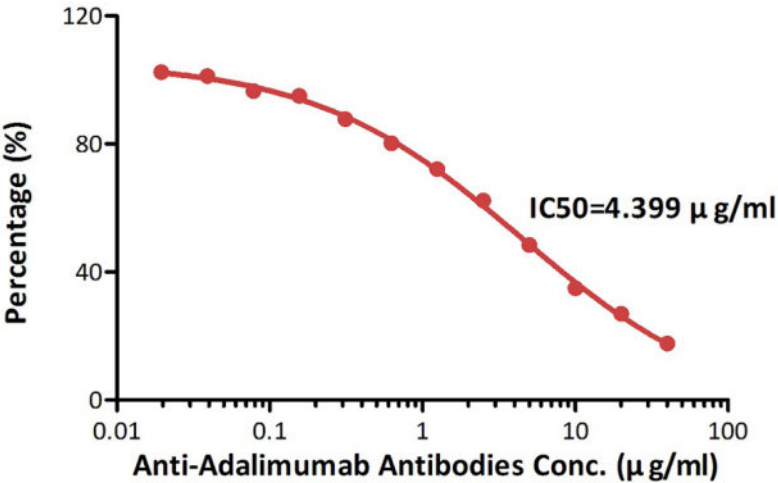
Detection of adalimumab by bridging ELISA in serum. Immobilized Anti-Adalimumab Antibodies (Cat. No. ADB-Y23) at 2 µg/mL, add increasing concentrations of adalimumab (10% human serum) and then add Biotinylated Anti-Adalimumab Antibodies (Cat. No. ADB-BY17) at 2 µg/mL. Detection was performed using HRP-conjugated streptavidin with a sensitivity of 4.8 ng/mL.

Anti-Adalimumab Antibodies—Binding ELISA



Immobilized adalimumab at 1 µg/mL (100 µL/well) can bind Biotinylated Anti-Adalimumab Antibodies (Cat. No. ADB-BY17) with a linear range of 0.78-25 ng/mL.

Anti-Adalimumab Antibodies—Inhibition ELISA



ELISA analysis shows that the binding of adalimumab to Human TNF-alpha, Tag Free, low endotoxin (Cat. No. TNA-H4211) was inhibited by increasing concentration of Biotinylated Anti-Adalimumab Antibodies (Cat. No. ADB-BY17). The concentration of adalimumab used is 6 ng/mL. The IC50 is 4.399 µg/mL.

Background

Adalimumab is a human monoclonal antibody against TNF-alpha. It is produced by recombinant DNA technology using a mammalian cell expression system. It consists of 1330 amino acids and has a molecular weight of approximately 148 kilodaltons.

Clinical and Translational Updates

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.