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 Rituximab $F(ab')_2$.

Isotype

IgG1/kappa

Specificity

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

Purity

>95% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in
Tris with Glycine, Arginine and NaCl, pH7.5. 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

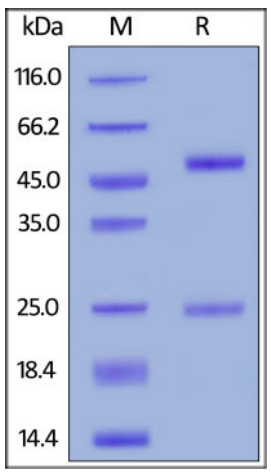
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

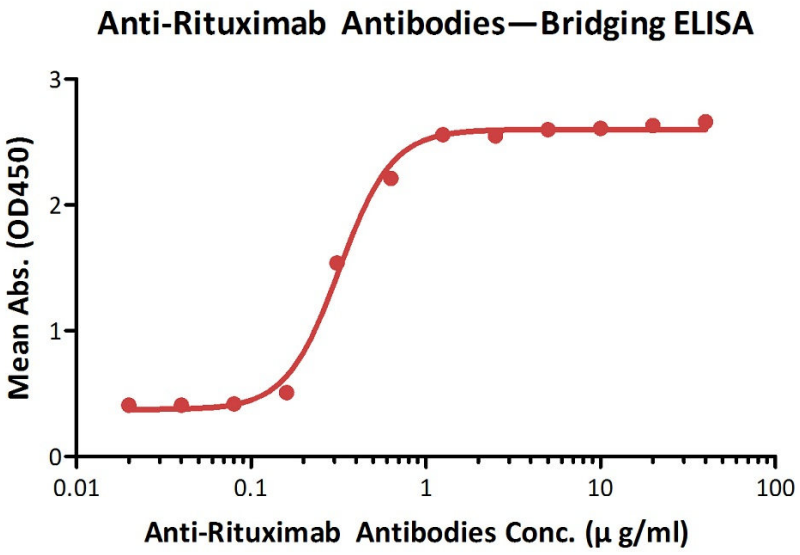
- 4-8°C for 12 months in lyophilized state;
- -70°C for 3 years under sterile conditions after reconstitution.

SDS-PAGE

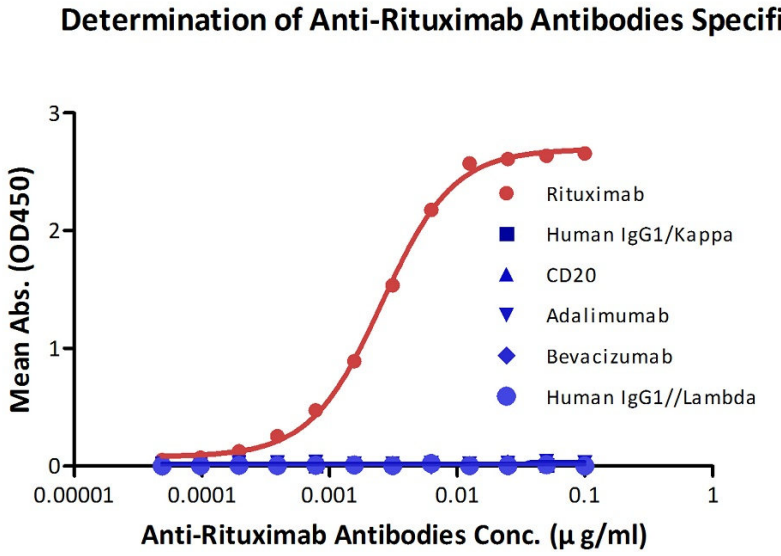


Anti-Rituximab Antibodies on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

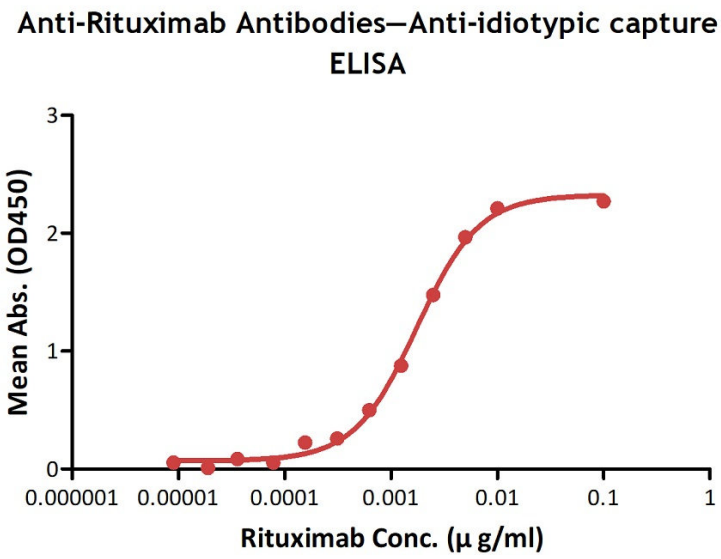
Bioactivity-ELISA



Anti-Rituximab Antibodies bridging ELISA for Anti-Drug Antibody (ADA) assay development. Immobilized rituximab at 5 µg/mL, add increasing concentrations of Anti-Rituximab Antibodies (Cat. No. RIB-Y35, 10% human serum) and then add biotinylated rituximab at 5 µg/mL. Detection was performed using HRP-conjugated streptavidin with a sensitivity of 20 ng/mL.

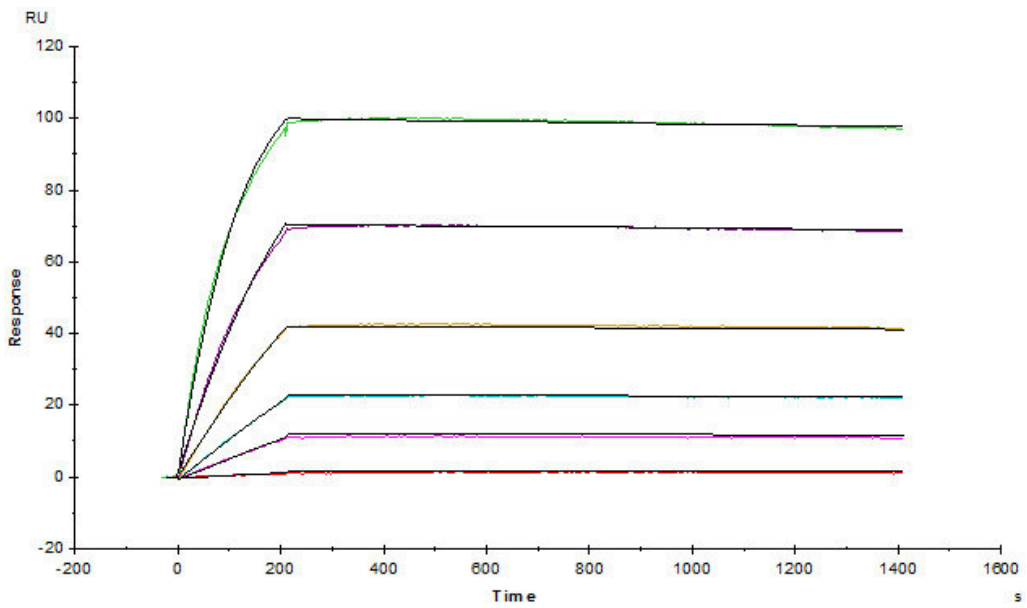


Demonstration of the specificity of Anti-Rituximab Antibodies (Cat. No. RIB-Y35) to the rituximab.



Detection of rituximab by anti-idiotypic capture ELISA in serum. Immobilized Anti-Rituximab Antibodies (Cat. No. RIB-Y35) at 0.5 µg/mL (100 µL/well), add increasing concentrations of rituximab (0.1% human serum). Detection was performed using goat Anti-Human IgG with a sensitivity of 0.156 µg/mL.

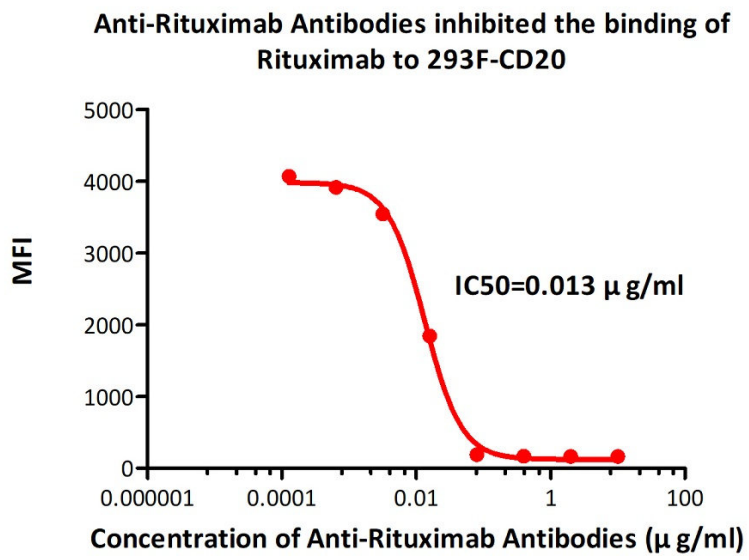
Bioactivity-SPR



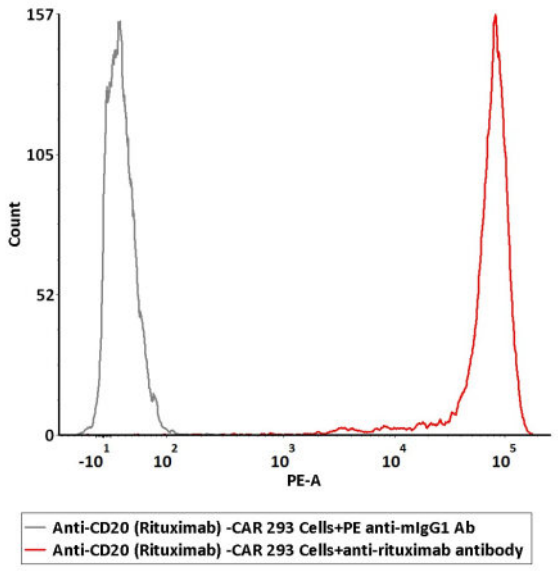
Anti-Rituximab Antibodies (mouse IgG1, Cat. No. RIB-Y35) captured on CM5 chip via anti-mouse antibodies surface, can bind Human rituximab with an

affinity constant of 0.03 nM.

Bioactivity-FACS



FACS analysis shows that the binding of rituximab to 293F overexpressing CD20 was inhibited by increasing concentration of Anti-Rituximab Antibodies (Cat. No. RIB-Y35). The concentration of rituximab used is 10 ng/mL. The IC50 is 0.013 μg/mL (Routinely tested).



2e5 Anti-CD20 (Rituximab)-CAR 293 cells were first stained with Anti-Rituximab Antibodies (mouse IgG1, Cat. No. RIB-Y35) and followed by incubation with PE-labeled Anti-Mouse IgG1 antibody. PE-labeled Anti-Mouse IgG1 antibody was used as a negative control (Routinely tested).

Background

Rituxan is a genetically engineered chimeric murine/human monoclonal antibody directed against the CD20 antigen found on the surface of normal and malignant B lymphocytes. The antibody is an IgG1 kappa immunoglobulin containing murine light- and heavy-chain variable region sequences and human constant region sequences. Rituximab is composed of two heavy chains of 451 amino acids and two light chains of 213 amino acids

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