

Source

Anti-Trastuzumab Antibody (AY1b) (TRB-Y1b) are expressed from human 293 cells (HEK293).

Isotype

Mouse IgG1/kappa

Specificity

Recognizes Trastuzumab 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 with trehalose as protectant.

Contact us for customized product form or formulation.

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.

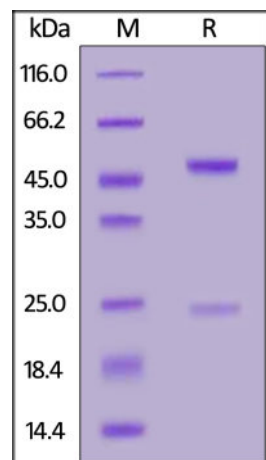
Storage

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

Please avoid repeated freeze-thaw cycles.

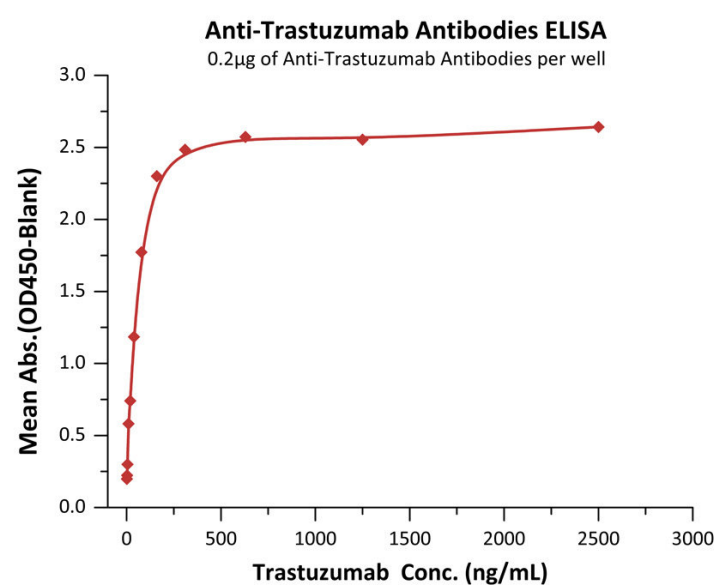
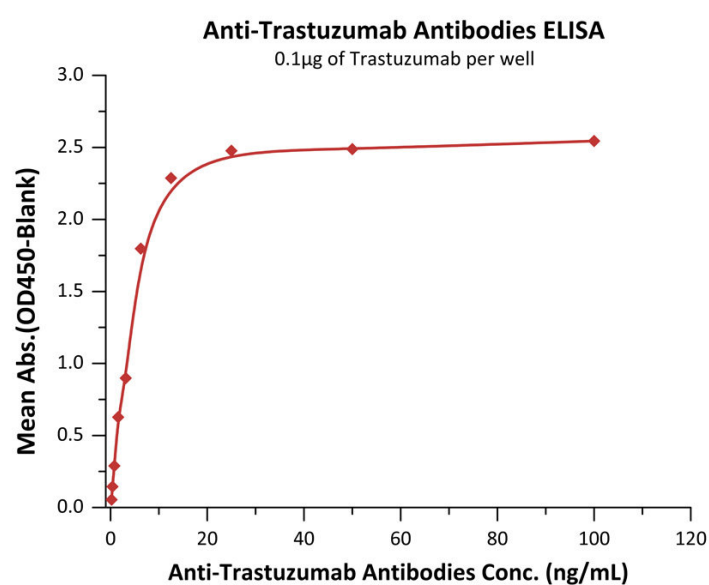
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 12 months under sterile conditions after reconstitution.

SDS-PAGE

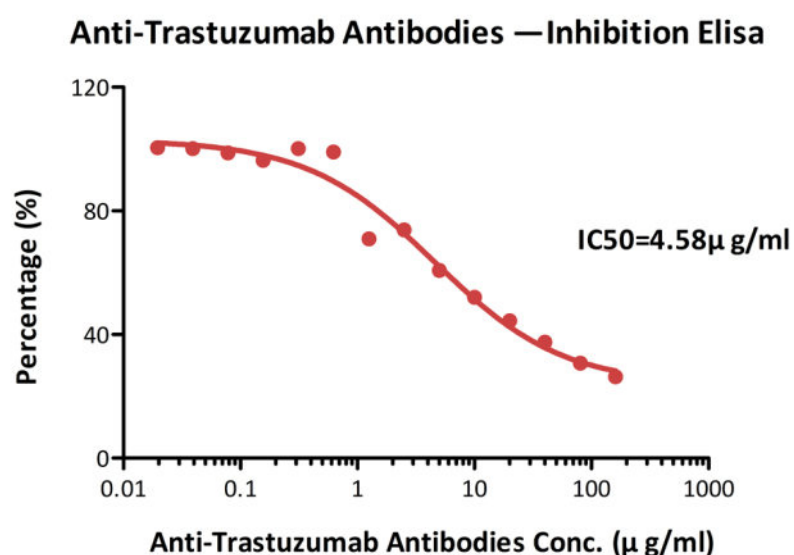
Anti-Trastuzumab Antibody (AY1b) on SDS-PAGE under reducing (R) condition. The gel was stained overnight with Coomassie Blue. The purity of the protein is greater than 95%.

Bioactivity-Elisa



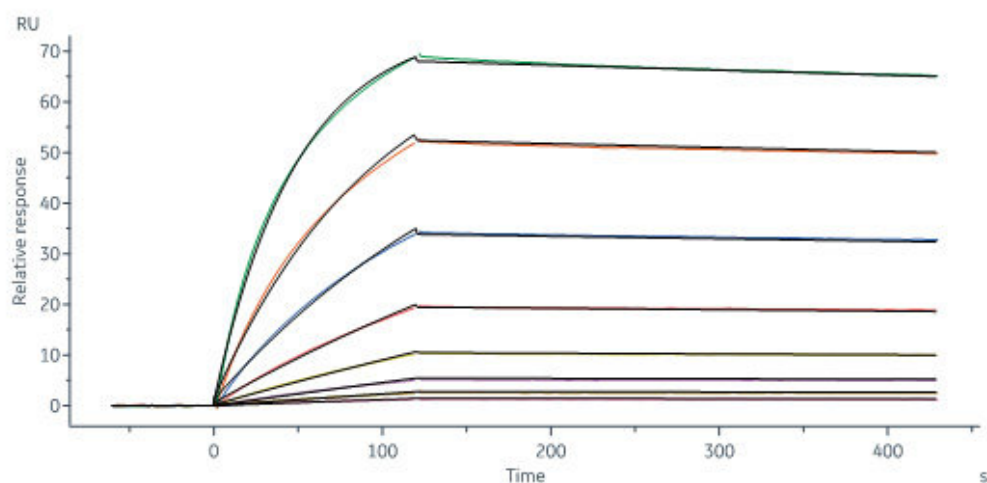
Immobilized Trastuzumab at 1 µg/mL (100 µL/well) can bind Anti-Trastuzumab Antibody (AY1b) (Cat. No. TRB-Y1b) with a linear range of 0.4-6 ng/mL (QC tested).

Immobilized Anti-Trastuzumab Antibody (AY1b) (Cat. No. TRB-Y1b) at 2 µg/mL, add increasing concentrations of Trastuzumab in the 10% human serum and then add Biotinylated Anti-Trastuzumab Antibodies at 2 µg/mL. Detection was performed using HRP-conjugated streptavidin with sensitivity of 48 ng/mL (QC tested).



Serial dilutions of Anti-Trastuzumab Antibody (AY1b) (Cat. No. TRB-Y1b) was detected by Biotinylated Human Her2, His,Avitag (Cat. No. HE2-H82E2) with a half maximal inhibitory concentration (IC₅₀) of 4.58 µg/mL (Routinely tested).

Bioactivity-SPR



Trastuzumab captured on CM5 chip via Anti-human IgG Fc antibodies surface can bind Anti-Trastuzumab Antibody (AY1b) (Cat. No. TRB-Y1b) with an affinity constant of 0.729 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

Trastuzumab, is a monoclonal antibody used to treat breast cancer. Specifically it is used for breast cancer that is HER2 receptor positive. Trastuzumab works by binding to the HER2 receptor and slowing down cell duplication. Trastuzumab is a recombinant IgG1 kappa, humanized monoclonal antibody that selectively binds with high affinity in a cell-based assay ($K_d = 5 \text{ nM}$) to the extracellular domain of the human epidermal growth factor receptor protein.

Clinical and Translational Updates

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