Biotinylated Cynomolgus Her2 / ErbB2 Protein, His,Avitag™ (MALS verified)

Catalog # HE2-C82E3

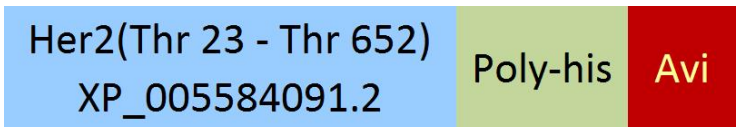
Synonym

ERBB2,CD340,HER-2,neu,HER2,MLN19,NEU,NGL,TKR1

Source

Biotinylated Cynomolgus Her2, His,Avitag(HE2-C82E3) is expressed from human 293 cells (HEK293). It contains AA Thr 23 - Thr 652 (Accession # XP_005584091.2).
Predicted N-terminus: Thr 23

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus, followed by an Avi tag (Avitag™)

The protein has a calculated MW of 72.9 kDa. The protein migrates as 90-105 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Labeling

Biotinylation of this product is performed using Avitag™ technology. Briefly, the single lysine residue in the Avitag is enzymatically labeled with biotin.

Protein Ratio

Passed as determined by the HABA assay / binding ELISA.

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>95% as determined by SDS-PAGE.

>90% as determined by SEC-MALS.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, pH7.4 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

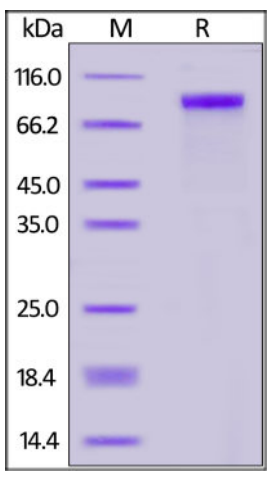
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

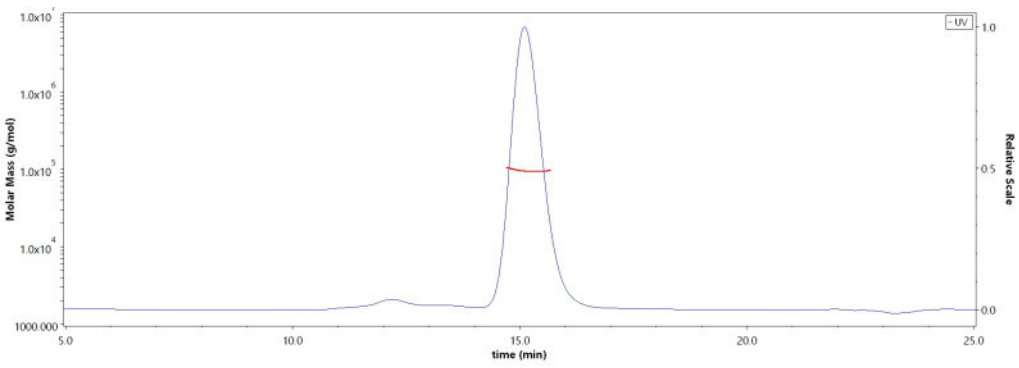
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



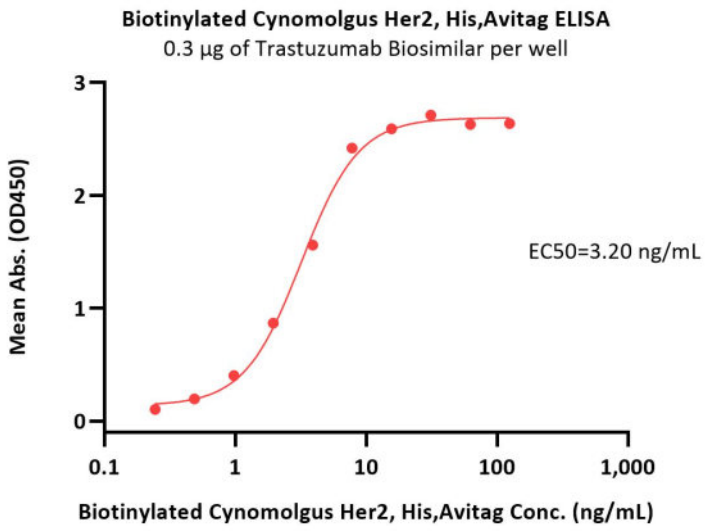
Biotinylated Cynomolgus Her2, His,Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

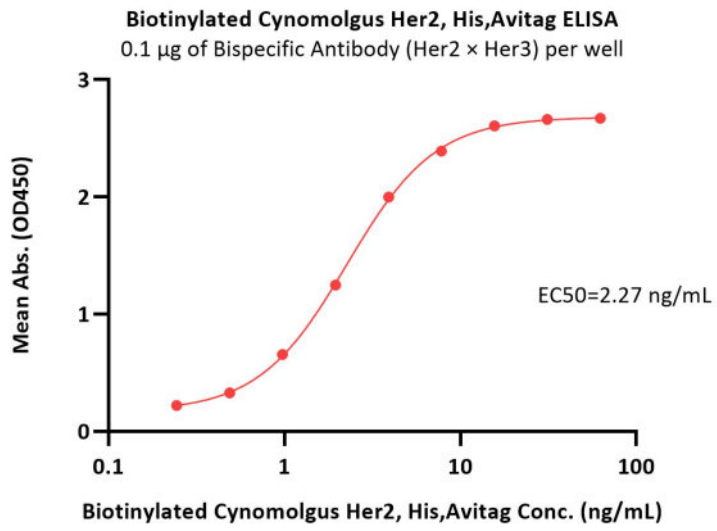


The purity of Biotinylated Cynomolgus Her2, His,Avitag (Cat. No. HE2-C82E3) is more than 90% and the molecular weight of this protein is around 90-100 kDa verified by SEC-MALS.
Report

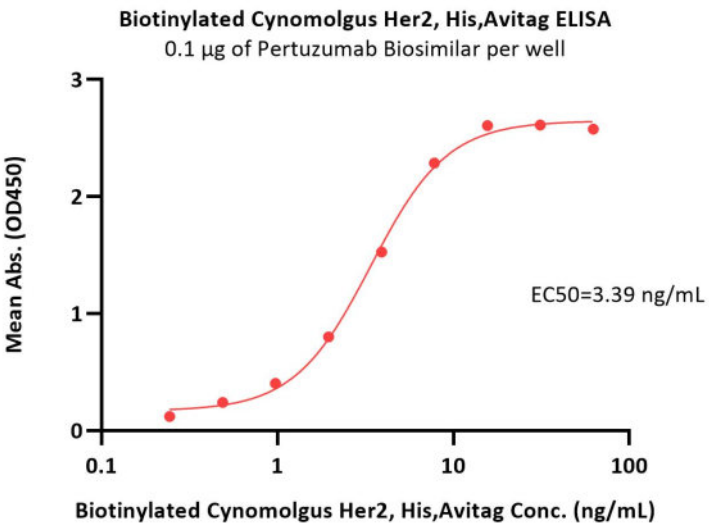
Bioactivity-ELISA



Immobilized Trastuzumab Biosimilar at 3 μg/mL (100 μL/well) can bind Biotinylated Cynomolgus Her2, His,Avitag (Cat. No. HE2-C82E3) with a linear range of 0.2-8 ng/mL (QC tested).



Immobilized Bispecific Antibody (Her2 × Her3) at 1 μg/mL (100 μL/well) can bind Biotinylated Cynomolgus Her2, His,Avitag (Cat. No. HE2-C82E3) with a linear range of 0.2-8 ng/mL (Routinely tested).



Immobilized Pertuzumab Biosimilar at 1 μg/mL (100 μL/well) can bind Biotinylated Cynomolgus Her2, His,Avitag (Cat. No. HE2-C82E3) with a linear range of 0.2-8 ng/mL (Routinely tested).

Background

Human Epidermal growth factor Receptor 2 (HER2) is also called ERBB2, HER-2,HER-2 /neu, NEU, NGL,TKR1 and c-erb B2,and is a protein giving higher aggressiveness in breast cancers. It is a member of the ErbB protein family, more commonly known as the epidermal growth factor receptor family. HER2 is a cell membrane surface-bound receptor tyrosine kinase and is normally involved in the signal transduction pathways leading to cell growth and differentiation. HER2 is thought to be an orphan receptor, with none of the EGF family of ligands able to activate it. Approximately 30% of breast cancers have an amplification of the HER2 gene or overexpression of its protein product. Overexpression of this receptor in breast cancer is associated with increased disease recurrence and worse prognosis. HER2 appears to play roles in development, cancer, communication at the neuromuscular junction and regulation of cell growth and differentiation .

Clinical and Translational Updates

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