Human Her2 & ErbB3 Protein, Fc Tag&Fc Tag (MALS verified)

Catalog # HE2-H5254

Synonym

Her2 & ErbB3,HER2 & HER3

Source

Human Her2 & ErbB3 Protein, Fc Tag&Fc Tag(HE2-H5254) is expressed from human 293 cells (HEK293). It contains AA Thr 23 - Thr 652 & Ser 20 - Thr 643 (Accession # P04626 & P21860).
Predicted N-terminus: Thr 23 & Ser 20

Molecular Characterization

HER2 (Thr 23 - Thr 652) P04626	Fc(Pro 100 - Lys 330) P01857
ErbB3 (Ser 20 - Thr 643) P21860	Fc(Pro 100 - Lys 330) P01857

Human Her2 & ErbB3 Protein, Fc Tag&Fc Tag, produced by co-expression of HER2 and ErbB3, has a calculated MW of 95.9 kDa (HER2) and 94.9 kDa (ErbB3). Subunit HER2 is fused with a human IgG1 Fc fragment at the C-terminus and subunit ErbB3 is fused with a human IgG1 Fc fragment at the C-terminus. The protein migrates as 110-130 kDa when calibrated against Star Ribbon Pre-stained Protein Marker under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 1.0 EU per μg by the LAL method / rFC method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM 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

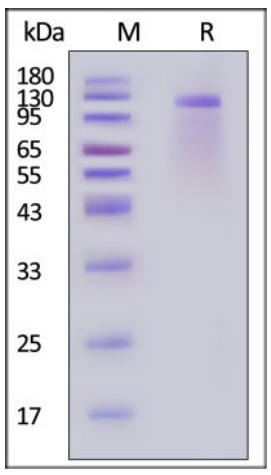
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

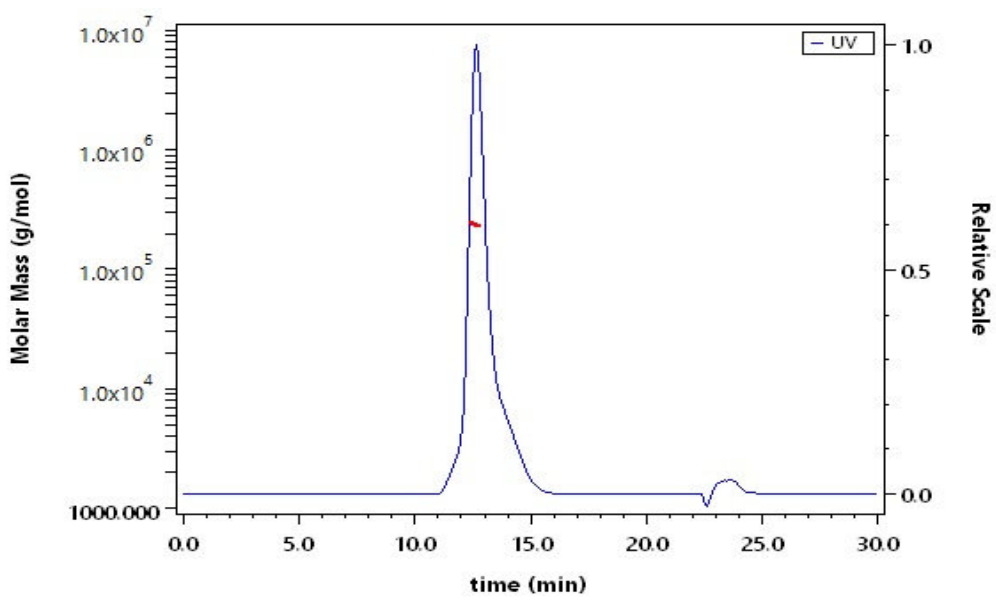
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



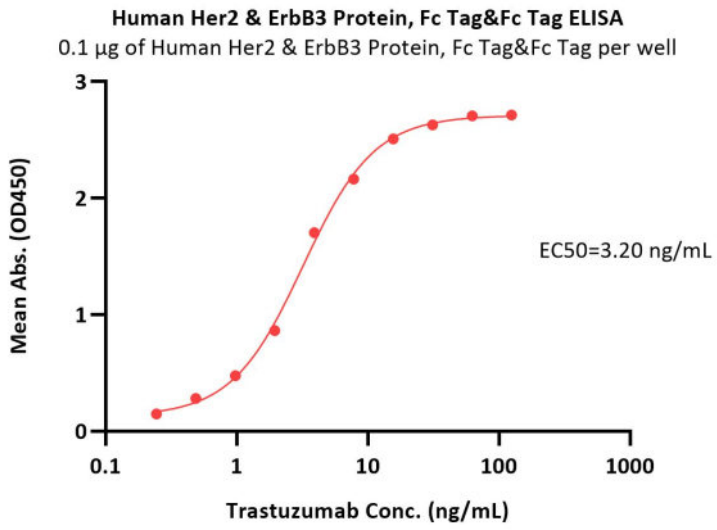
Human Her2 & ErbB3 Protein, Fc Tag&Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With Star Ribbon Pre-stained Protein Marker).

SEC-MALS

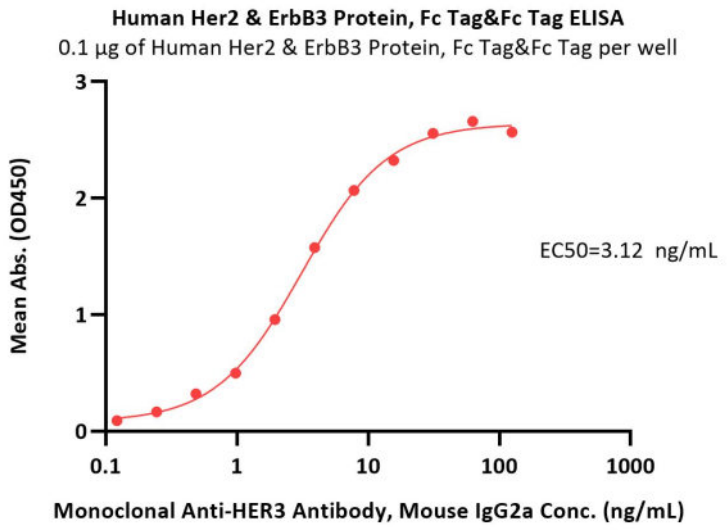


The purity of Human Her2 & ErbB3 Protein, Fc Tag&Fc Tag (Cat. No. HE2-H5254) is more than 85% and the molecular weight of this protein is around 200-250 kDa verified by SEC-MALS.
Report

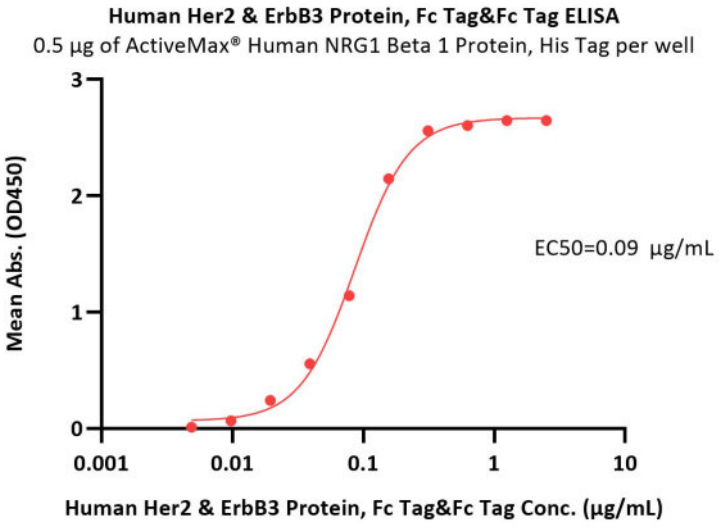
Bioactivity-ELISA



Immobilized Human Her2 & ErbB3 Protein, Fc Tag&Fc Tag (Cat. No. HE2-H5254) at 1 μg/mL (100 μL/well) can bind Trastuzumab with a linear range of 0.2-4 ng/mL (QC tested).

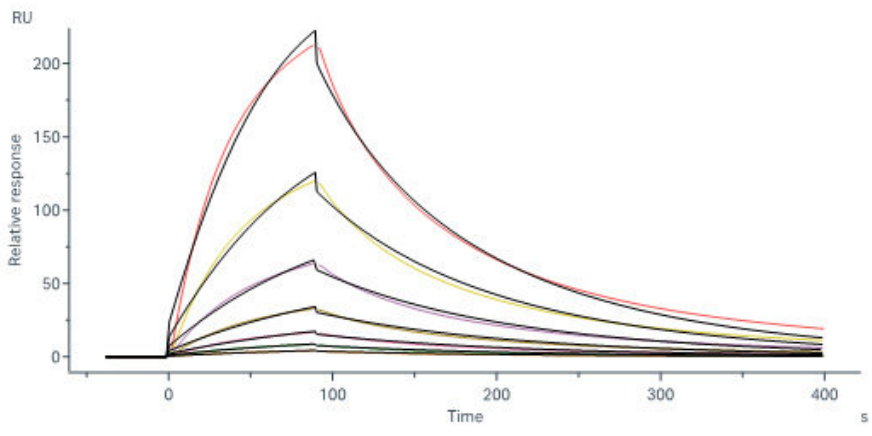


Immobilized Human Her2 & ErbB3 Protein, Fc Tag&Fc Tag (Cat. No. HE2-H5254) at 1 μg/mL (100 μL/well) can bind Monoclonal Anti-HER3 Antibody, Mouse IgG2a with a linear range of 0.1-4 ng/mL (Routinely tested).



Immobilized ActiveMax® Human NRG1 Beta 1 Protein, His Tag (Cat. No. NR1-H5246) at 5 μg/mL (100 μL/well) can bind Human Her2 & ErbB3 Protein, Fc Tag&Fc Tag (Cat. No. HE2-H5254) with a linear range of 0.02-0.156 μg/mL (Routinely tested).

Bioactivity-SPR



Human NRG1 Beta 1, Fc Tag, premium grade (Cat. No. NR1-H5268) immobilized on CM5 Chip can bind Human Her2 & ErbB3 Protein, Fc Tag&Fc Tag (Cat. No. HE2-H5254) with an affinity constant of 114 nM as determined in a SPR assay (Biacore 8K) (Routinely tested).

Background

The Human Epidermal Growth Factor Receptor 2 (HER2) and HER3 form a potent pro-oncogenic heterocomplex upon binding of growth factor neuregulin-1β (NRG1β). The HER2/HER3 extracellular dimer dynamics likely have important implications for modulating receptor activity.