

Synonym

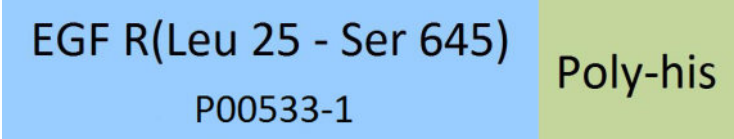
EGFR,ERBB,ERBB1,HER1,PIG61,mENA

Source

Human EGF R, His Tag(EGR-H5222) is expressed from human 293 cells (HEK293). It contains AA Leu 25 - Ser 645 (Accession # [P00533-1](#)).

Predicted N-terminus: Leu 25

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 70.5 kDa. The protein migrates as 95-110 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

>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

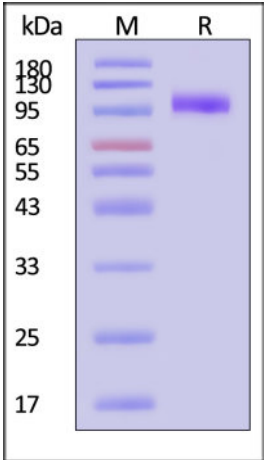
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

This product is stable after storage at:

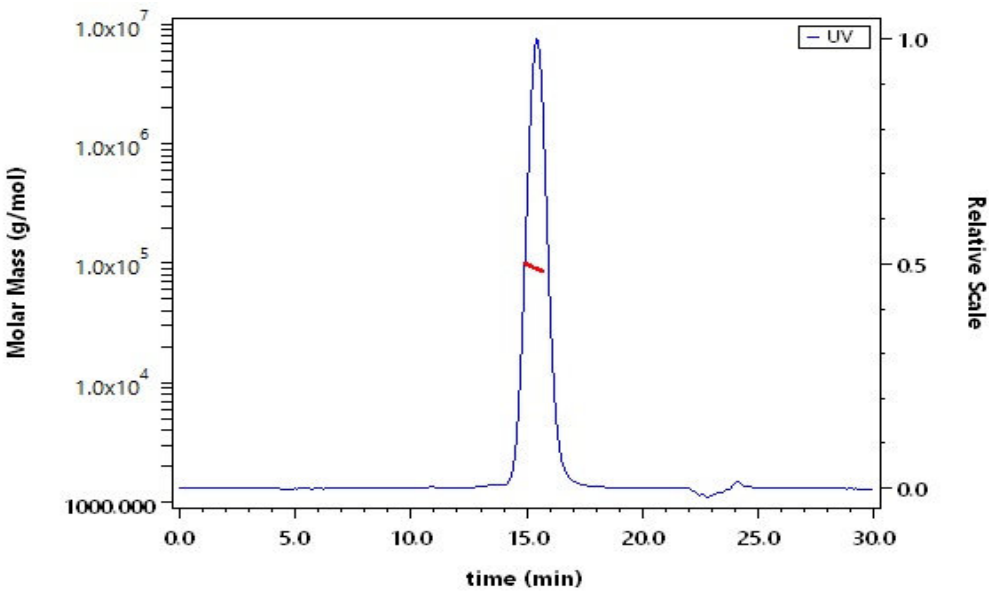
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



Human EGF R, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95% (With [Star Ribbon Pre-stained Protein Marker](#)).

SEC-MALS



The purity of Human EGF R, His Tag (Cat. No. EGR-H5222) is more than 90% and the molecular weight of this protein is around 80-105 kDa verified by SEC-MALS.

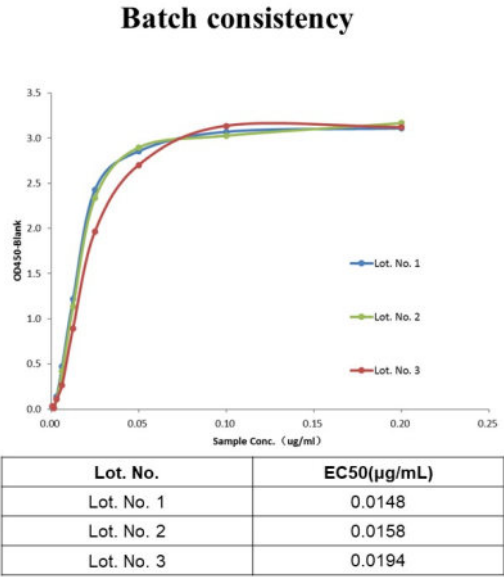
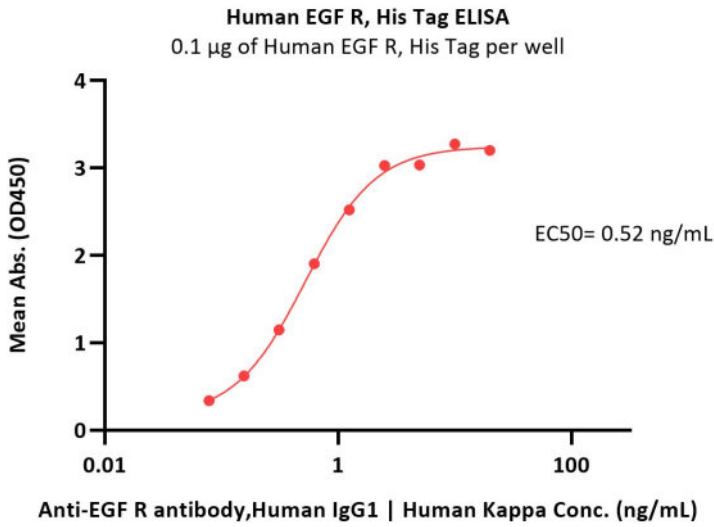
[Report](#)

Bioactivity-ELISA

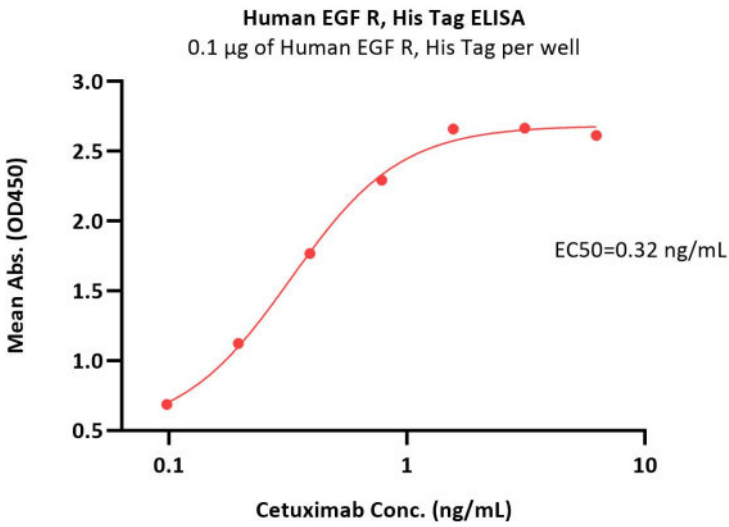
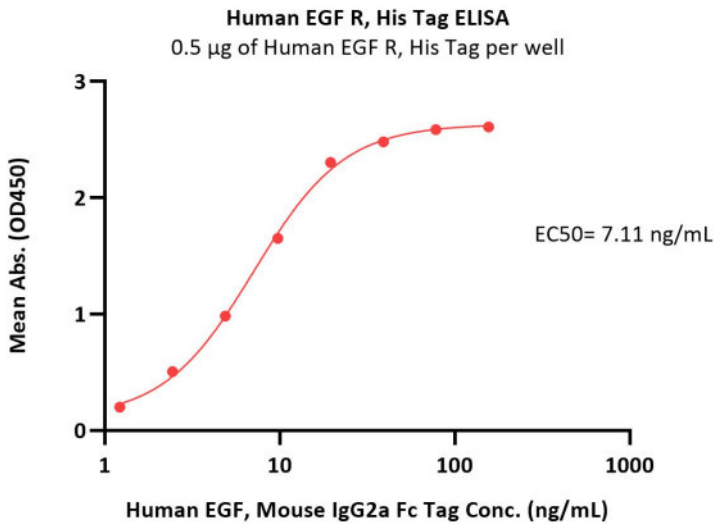


Human EGF R Protein, His Tag (MALS verified)

Catalog # EGR-H5222

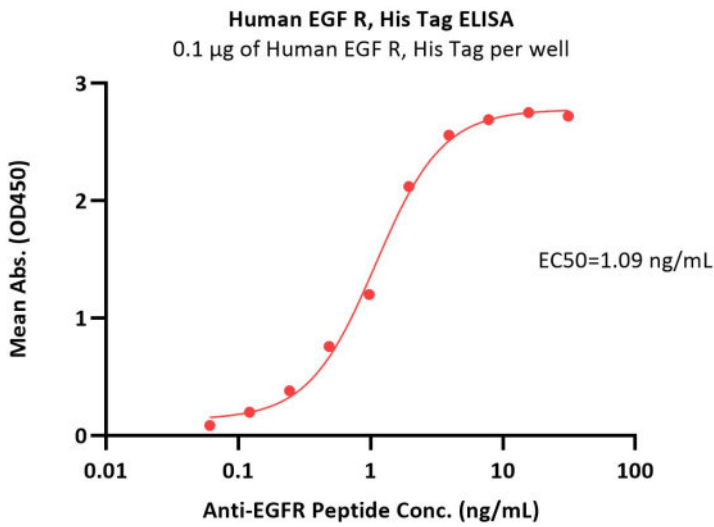


Immobilized Human EGF R, His Tag (Cat. No. EGR-H5222) at 1 µg/mL (100 µL/well) can bind Anti-EGF R antibody, Human IgG1 | Human Kappa with a linear range of 0.12-1.25 ng/mL (QC tested).



Immobilized Human EGF R, His Tag (Cat. No. EGR-H5222) at 5 µg/mL (100 µL/well) can bind Human EGF, Mouse IgG2a Fc Tag (Cat. No. EGF-H525b) with a linear range of 1-20 ng/mL (Routinely tested).

Immobilized Human EGF R, His Tag (Cat. No. EGR-H5222) at 1 µg/mL (100 µL/well) can bind Cetuximab with a linear range of 0.1-1 ng/mL (Routinely tested).



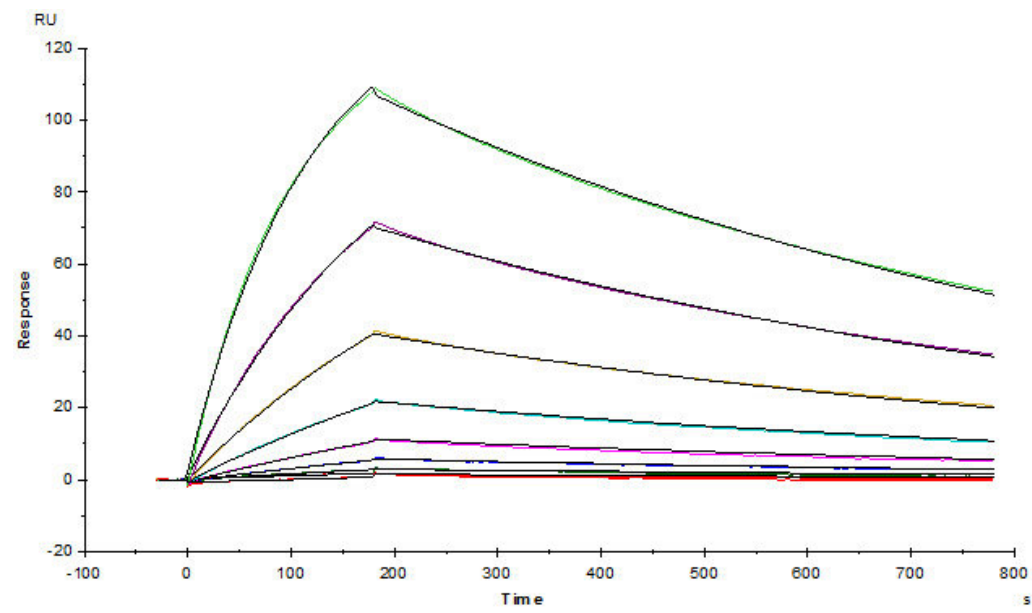
Immobilized Human EGF R, His Tag (Cat. No. EGR-H5222) at 1 µg/mL (100 µL/well) can bind Anti-EGFR Peptide with a linear range of 0.06-2 ng/mL (Routinely tested).

Bioactivity-SPR

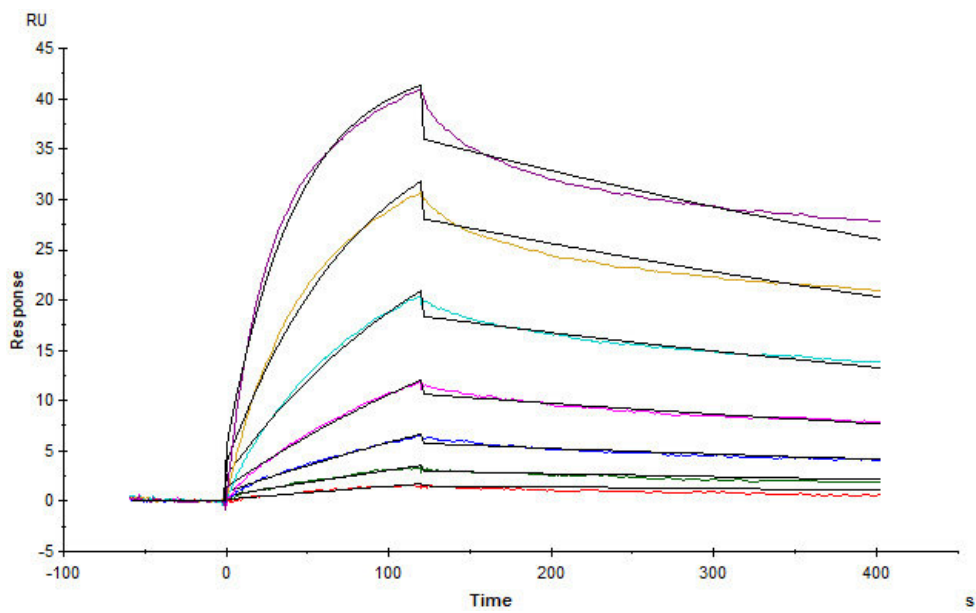


Human EGF R Protein, His Tag (MALS verified)

Catalog # EGR-H5222

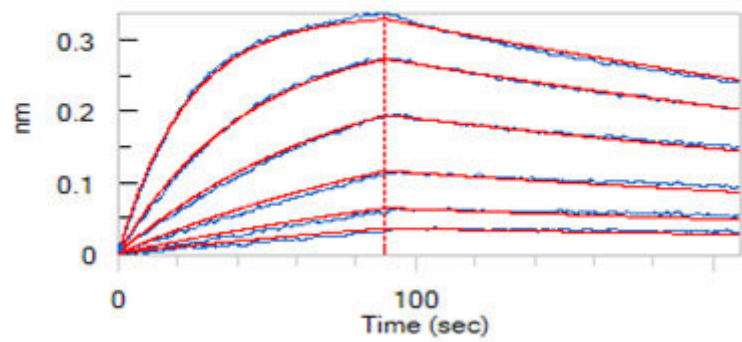


Erbitux (Cetuximab) captured on CM5 chip via anti-human IgG Fc antibodies surface, can bind Human EGF R, His Tag (Cat. No. EGR-H5222) with an affinity constant of 1.3 nM as determined in a SPR assay (Biacore T200) (Routinely tested).



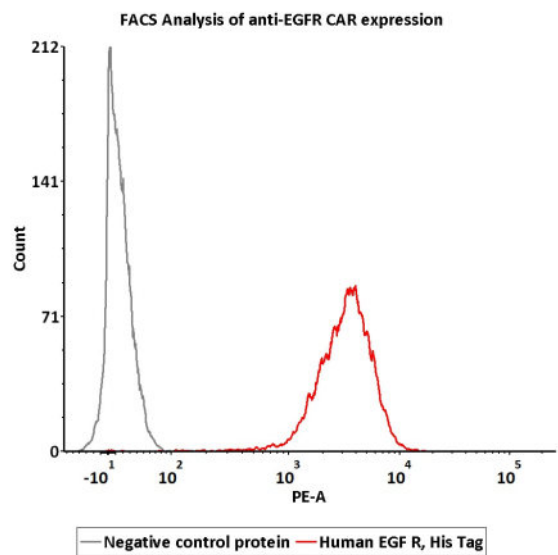
Human EGF R, His Tag (Cat. No. EGR-H5222) captured on CM5 Chip via anti-His antibody can bind Human EGF, Mouse IgG2a Fc Tag (Cat. No. EGF-H525b) with an affinity constant of 2.63 nM as determined in SPR assay (Biacore T200) (Routinely tested).

Bioactivity-BLI



Loaded Erbitux (Cetuximab) on AHC Biosensor, can bind Human EGF R, His Tag (Cat. No. EGR-H5222) with an affinity constant of 1.23 nM as determined in BLI assay (ForteBio Octet Red96e) (Routinely tested).

Bioactivity-FACS



2e5 of Anti-EGFR CAR-293 cells were stained with 100  $\mu$ L of 1  $\mu$ g/mL of Human EGF R, His Tag (Cat. No. EGR-H5222) and negative control protein respectively, washed and then followed by PE anti-His antibody and analyzed with FACS (Routinely tested).



Background

The epidermal growth factor receptor (EGFR; ErbB-1; HER1 in humans) is the cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. The epidermal growth factor receptor is a member of the ErbB family of receptors, a subfamily of four closely related receptor tyrosine kinases: EGFR (ErbB-1), HER2/c-neu (ErbB-2), Her 3 (ErbB-3) and Her 4 (ErbB-4). Mutations affecting EGFR expression or activity could result in cancer.

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and more!

