Human EGF R Protein, His Tag, low endotoxin (MALS verified)

Catalog # EGR-H522a

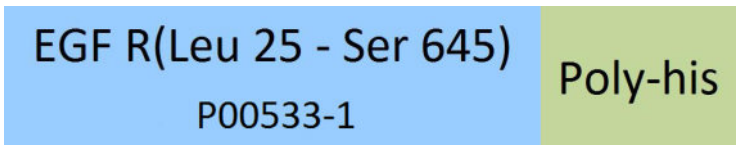
Synonym

EGFR,ERBB,ERBB1,HER1,PIG61,mENA

Source

Human EGF R, His Tag, low endotoxin(EGR-H522a) 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 70.5kDa. The protein migrates as 77-104 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Endotoxin

Less than 0.01 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

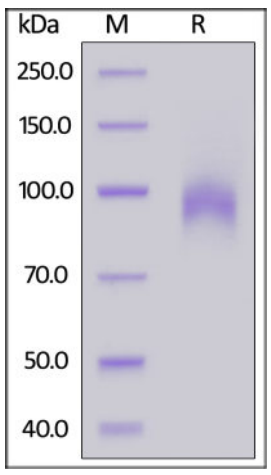
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

This product is stable after storage at:

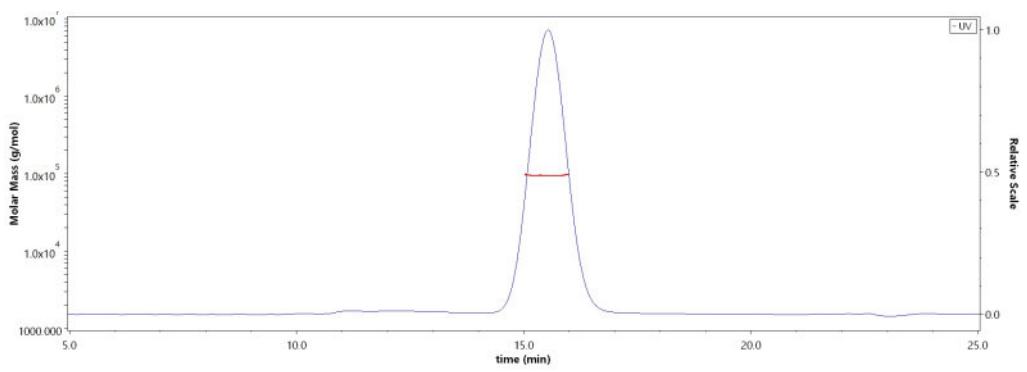
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



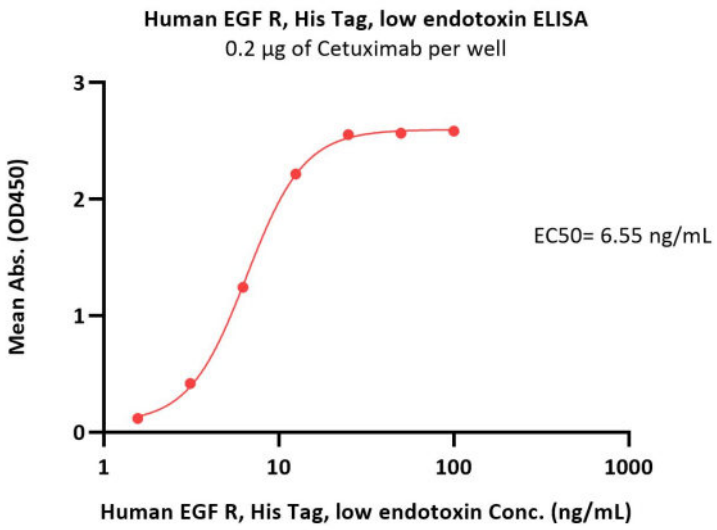
Human EGF R, His Tag, low endotoxin on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

SEC-MALS

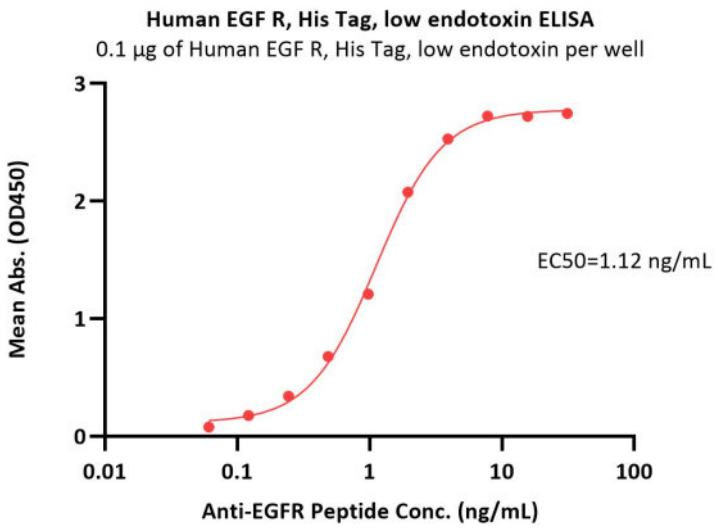


The purity of Human EGF R, His Tag, low endotoxin (Cat. No. EGR-H522a) is more than 90% and the molecular weight of this protein is around 77-104 kDa verified by SEC-MALS.
Report

Bioactivity-ELISA

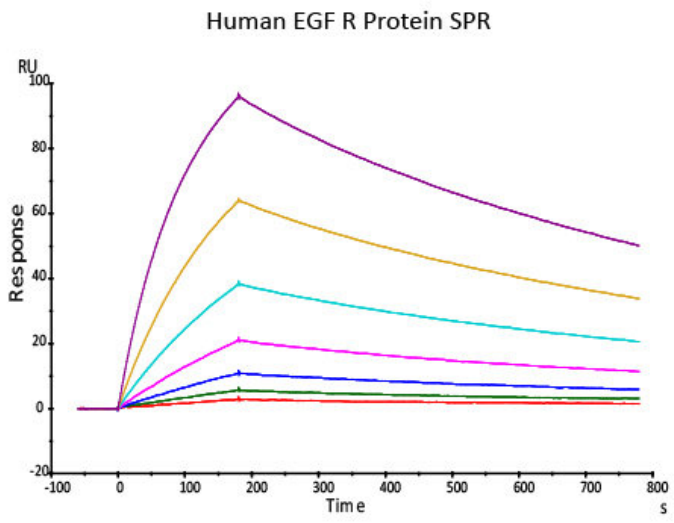


Immobilized Cetuximab at 2 μg/mL (100 μL/well) can bind Human EGF R, His Tag, low endotoxin (Cat. No. EGR-H522a) with a linear range of 1.6-13 ng/mL (QC tested).

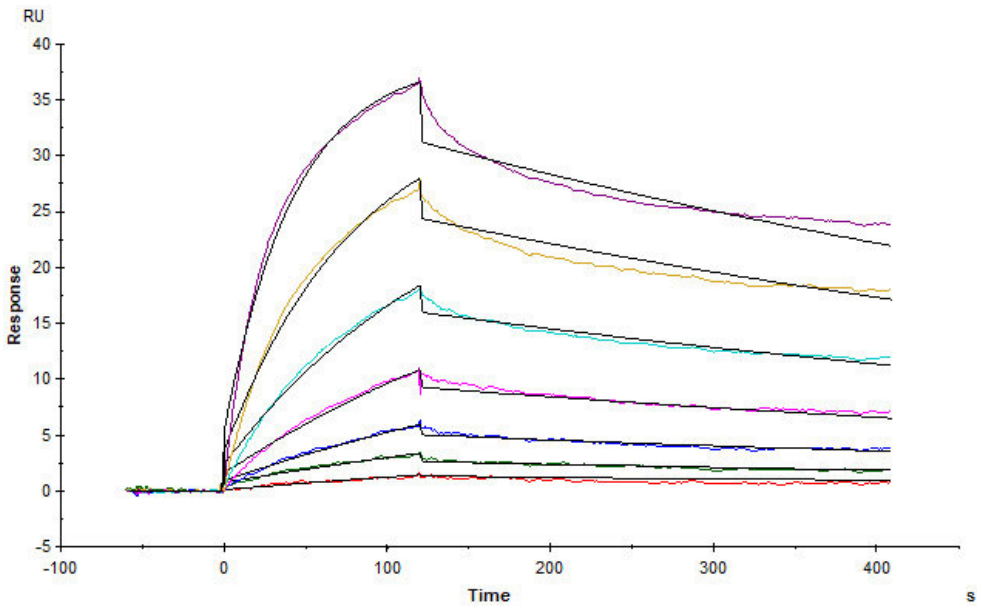


Immobilized Human EGF R, His Tag, low endotoxin (Cat. No. EGR-H522a) at 1 μg/mL (100 μL/well) can bind Anti-EGFR Peptide with a linear range of 0.06-2 ng/mL (Routinely tested).

Bioactivity-SPR



Immobilized Erbitux on CM5 Chip via anti-human Fc IgG, can bind Human EGF R, His Tag, low endotoxin (Cat.No. EGR-H522a) with an affinity constant of 0.492 nM as determined in SPR assay (Biacore T200) (Routinely tested).



Human EGF R, His Tag, low endotoxin (Cat. No. EGR-H522a) 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 2.76 nM as determined in SPR assay (Biacore T200) (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.

Clinical and Translational Updates