

#### **Synonym**

EGFR, ERBB, ERBB1, HER1, PIG61, mENA

#### **Source**

Human EGF R, Fc Tag(EGR-H5252) is expressed from human 293 cells (HEK293). It contains AA Leu 25 - Ser 645 (Accession # P00533-1). Predicted N-terminus: Leu 25

#### **Molecular Characterization**

EGF R(Leu 25 - Ser 645) Fc(Pro 100 - Lys 330) P00533-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 94.7 kDa. The protein migrates as 110-140 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

#### **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  $0.22~\mu m$  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

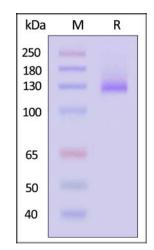
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

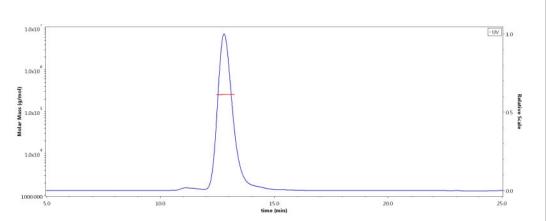
### **SDS-PAGE**



Human EGF R, Fc 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).

## **Bioactivity-ELISA**

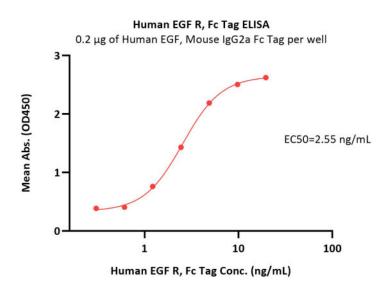
### **SEC-MALS**



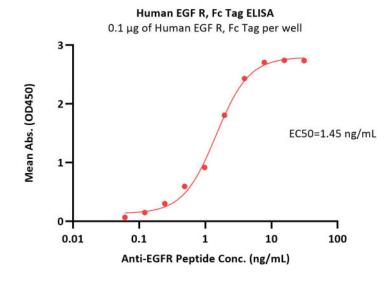
The purity of Human EGF R, Fc Tag (Cat. No. EGR-H5252) is more than 90% and the molecular weight of this protein is around 220-260 kDa verified by SEC-MALS.

Report

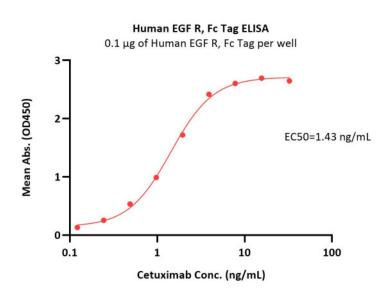




Immobilized Human EGF, Mouse IgG2a Fc Tag (Cat. No. EGF-H525b) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Human EGF R, Fc Tag (Cat. No. EGR-H5252) with a linear range of 0.3-5 ng/mL (QC tested).



Immobilized Human EGF R, Fc Tag (Cat. No. EGR-H5252) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Anti-EGFR Peptide with a linear range of 0.06-2 ng/mL (Routinely tested).



Immobilized Human EGF R, Fc Tag (Cat. No. EGR-H5252) at 1  $\mu$ g/mL (100  $\mu$ L/well) can bind Cetuximab with a linear range of 0.1-2 ng/mL (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**

