# Biotinylated Mouse EGF R Protein, Fc,Avitag™ (MALS verified)

Catalog # EGR-M82F3



### Synonym

EGFR,ERBB,ERBB1,HER1,PIG61,mENA

### Source

Biotinylated Mouse EGF R Protein, Fc, Avitag(EGR-M82F3) is expressed from human 293 cells (HEK293). It contains AA Leu 25 - Ser 647 (Accession # Q01279-1).

Predicted N-terminus: Leu 25

### **Molecular Characterization**

EGF R(Leu 25 - Ser 647) Fc(Pro 100 - Lys 330)
Q01279-1 P01857

This protein carries a human IgG1 Fc tag at the C-terminus, followed by an Avi tag (Avitag<sup>TM</sup>).

The protein has a calculated MW of 97.4 kDa. The protein migrates as 130-150 kDa when calibrated against <u>Star Ribbon Pre-stained Protein Marker</u> under reducing (R) condition (SDS-PAGE) due to glycosylation.

### Labeling

Biotinylation of this product is performed using Avitag<sup>TM</sup> 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  $\mu g$  by the LAL method.

## **Purity**

>90% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from  $0.22~\mu m$  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**

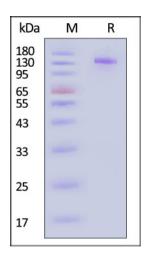
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

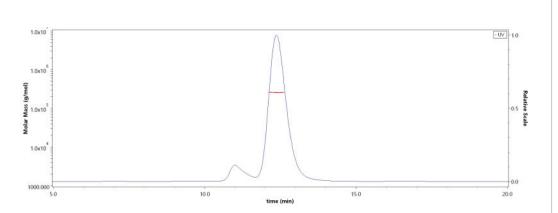
## **SDS-PAGE**



Biotinylated Mouse EGF R Protein, Fc, Avitag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90% (With <u>Star Ribbon Pre-stained Protein Marker</u>).

# **Bioactivity-ELISA**

## **SEC-MALS**



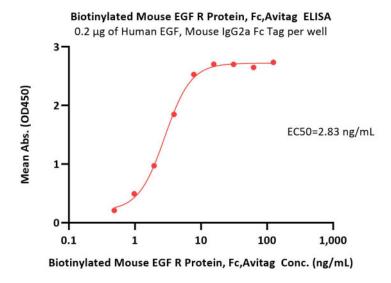
The purity of Biotinylated Mouse EGF R Protein, Fc, Avitag (Cat. No. EGR-M82F3) is more than 85% and the molecular weight of this protein is around 240-280 kDa verified by SEC-MALS.

<u>Report</u>

# Biotinylated Mouse EGF R Protein, Fc,Avitag™ (MALS verified)

Catalog # EGR-M82F3





Immobilized Human EGF, Mouse IgG2a Fc Tag (Cat. No. EGF-H525b) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Mouse EGF R Protein, Fc,Avitag (Cat. No. EGR-M82F3) with a linear range of 0.5-4 ng/mL (QC tested).

Biotinylated Mouse EGF R Protein, Fc,Avitag ELISA

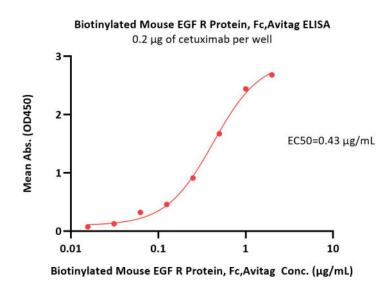
0.2 μg of Monoclonal Anti-Human EGF R Antibody, Human IgG1 per well

2
EC50=0.15 μg/mL

0.01 0.1 1 10

Biotinylated Mouse EGF R Protein, Fc,Avitag Conc. (μg/mL)

Immobilized Monoclonal Anti-Human EGF R Antibody, Human IgG1 (Cat. No. EGR-M1201) at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Mouse EGF R Protein, Fc,Avitag (Cat. No. EGR-M82F3) with a linear range of 0.02-0.313  $\mu$ g/mL (Routinely tested).



Immobilized cetuximab at 2  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Mouse EGF R Protein, Fc,Avitag (Cat. No. EGR-M82F3) with a linear range of 0.016-1  $\mu$ g/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**

