Catalog # EGR-M82E3



#### Synonym

EGFR,ERBB,ERBB1,HER1,PIG61,mENA

#### Source

Biotinylated Mouse EGF R Protein, His, Avitag(EGR-M82E3) is expressed from human 293 cells (HEK293). It contains AA Leu 25 - Ser 647 (Accession # <u>Q01279-1</u>).

Predicted N-terminus: Leu 25

# **Molecular Characterization**

EGF R(Leu 25 - Ser 647) Q01279-1 Poly-his Avi

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

The protein has a calculated MW of 72.9 kDa. The protein migrates as 95-130 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>™</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.

>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

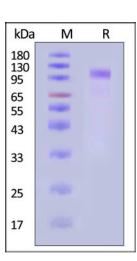
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

Please avoid repeated freeze-thaw cycles.

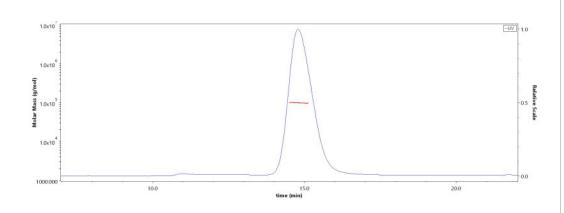
This product is stable after storage at:

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

# SDS-PAGE



# SEC-MALS



Biotinylated Mouse EGF R Protein, His, 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>).

The purity of Biotinylated Mouse EGF R Protein, His,Avitag (Cat. No. EGR-M82E3) is more than 90% and the molecular weight of this protein is around 80-110 kDa verified by SEC-MALS. Report

**Bioactivity-ELISA** 

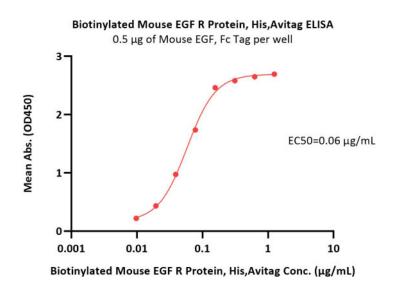


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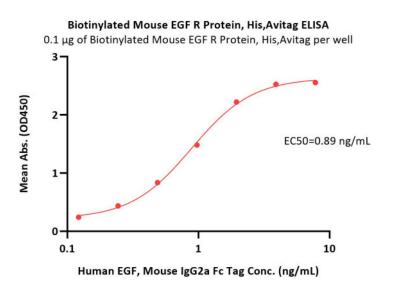




#### Catalog # EGR-M82E3



Immobilized Mouse EGF, Fc Tag (Cat. No. EGF-M5265) at 5  $\mu$ g/mL (100  $\mu$ L/well) can bind Biotinylated Mouse EGF R Protein, His,Avitag (Cat. No. EGR-M82E3) with a linear range of 0.01-0.078  $\mu$ g/mL (QC tested).



Immobilized Biotinylated Mouse EGF R Protein, His,Avitag (Cat. No. EGR-M82E3) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate can bind cetuximab with a linear range of 0.01-0.156  $\mu$ g/mL (Routinely tested).

Immobilized Biotinylated Mouse EGF R Protein, His,Avitag (Cat. No. EGR-M82E3) at 1  $\mu$ g/mL (100  $\mu$ L/well) on streptavidin (Cat. No. STN-N5116) precoated (0.5  $\mu$ g/well) plate can bind Human EGF, Mouse IgG2a Fc Tag (Cat. No. EGF-H525b) 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 (EGFfamily) 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**

Please contact us via TechSupport@acrobiosystems.com if you have any question on this product.



