

# Biotinylated Human EGFR/HER1 Protein, Ultra Low Endotoxin



Cat. No. EGF-HM401B-UL

## Description

<b>Source</b>	Recombinant Biotinylated Human EGFR/HER1 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Leu25-Ser645.
<b>Accession</b>	P00533-1
<b>Molecular Weight</b>	The protein has a predicted MW of 71.5 kDa. Due to glycosylation, the protein migrates to 90-120 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 0.01 EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

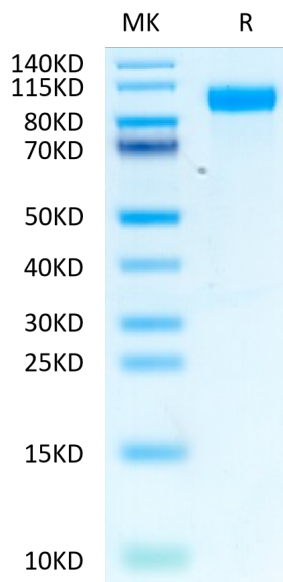
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3 months after reconstitution. Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## Background

The epidermal growth factor receptor is a transmembrane protein that is a receptor for members of the epidermal growth factor 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, HER2/neu, Her 3 and Her 4. Receptor tyrosine kinase binding ligands of the EGF family and activating several signaling cascades to convert extracellular cues into appropriate cellular responses.

## Assay Data

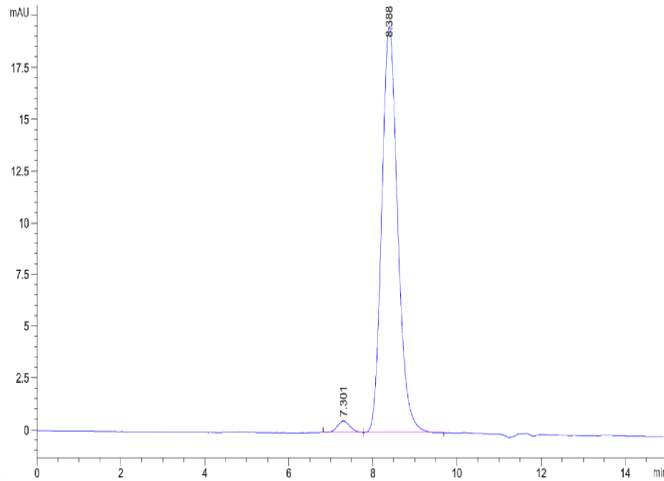
### Bis-Tris PAGE



Biotinylated Human EGFR on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### SEC-HPLC

**Assay Data**

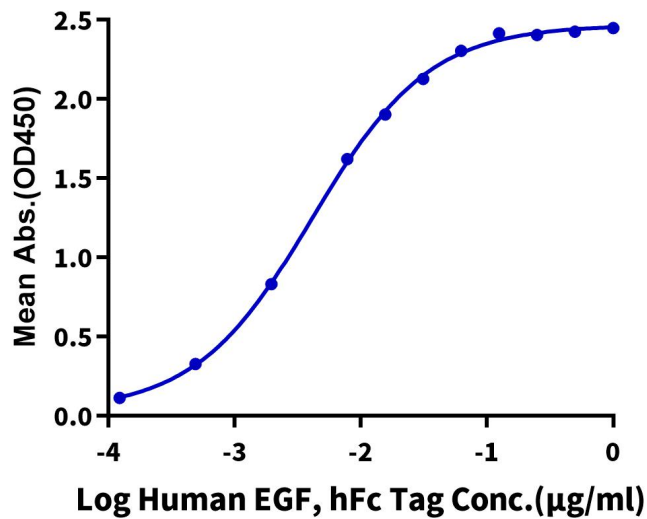


The purity of Biotinylated Human EGFR is greater than 95% as determined by SEC-HPLC.

**ELISA Data**

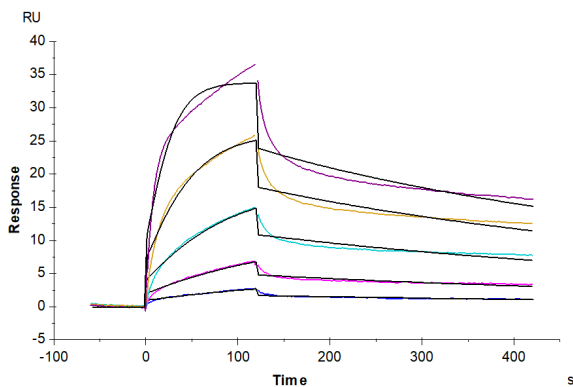
**Biotinylated Human EGFR, His Tag ELISA**

0.1µg Biotinylated Human EGFR, His Tag Per Well



Immobilized Biotinylated Human EGFR, His Tag at 1µg/ml (100µl/well) on the streptavidin precoated plate(5µg/ml). Dose response curve for Human EGF, hFc Tag with the EC50 of 4.1ng/ml determined by ELISA (QC Test).

**SPR Data**



Biotinylated Human EGFR, His Tag captured on CM5 Chip via Anti-his antibody can bind Human EGF, No Tag with an affinity constant of 0.62 nM as determined in SPR assay (Biacore T200).