

Biotinylated Human EGFR/HER1 Protein

Cat. No. EGF-HM401B

Description

Source	Recombinant Biotinylated Human EGFR/HER1 Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Leu25-Ser645.
Accession	P00533-1
Molecular Weight	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.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

Formulation and Storage

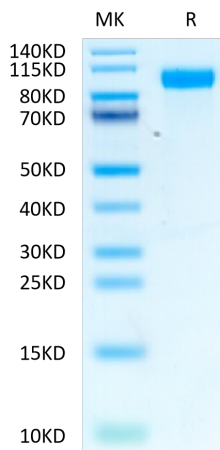
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-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.

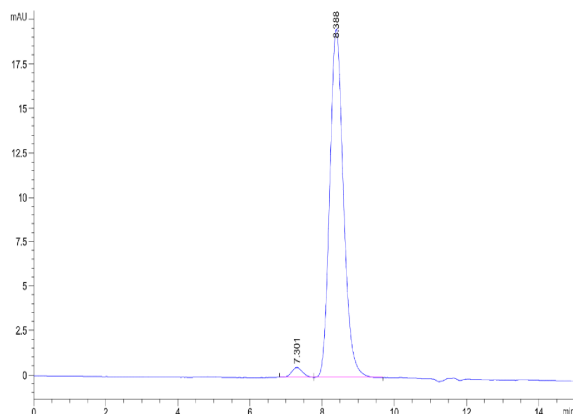
Assay Data

Bis-Tris PAGE



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

SEC-HPLC



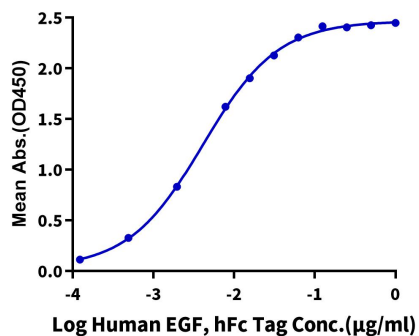
The purity of Biotinylated Human EGFR is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

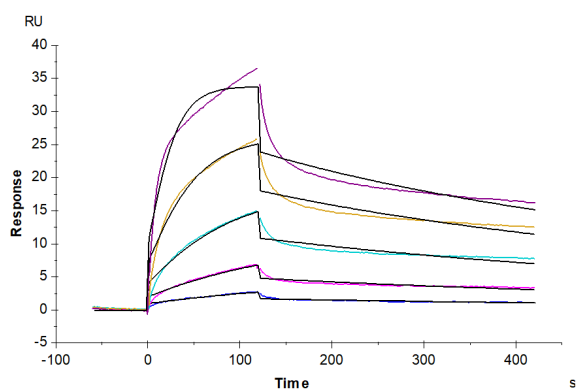
Biotinylated Human EGFR, His Tag ELISA

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).