

Human EGFR/HER1 Protein

Cat. No. EGF-HM401

Description

Source	Recombinant 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 85-110 kDa based on Tris-Bis PAGE result.
Endotoxin	Less than 1EU per μg by the LAL method.
Purity	> 95% as determined by Tris-Bis PAGE > 95% as determined by HPLC

Formulation and Storage

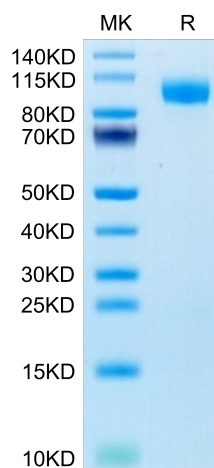
Formulation	Lyophilized from 0.22 μm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-20 to -80°C for 12 months as supplied from date of receipt. -20 to -80°C for 3-6 months in unopened state after reconstitution. 2-8°C for 2-7 days 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

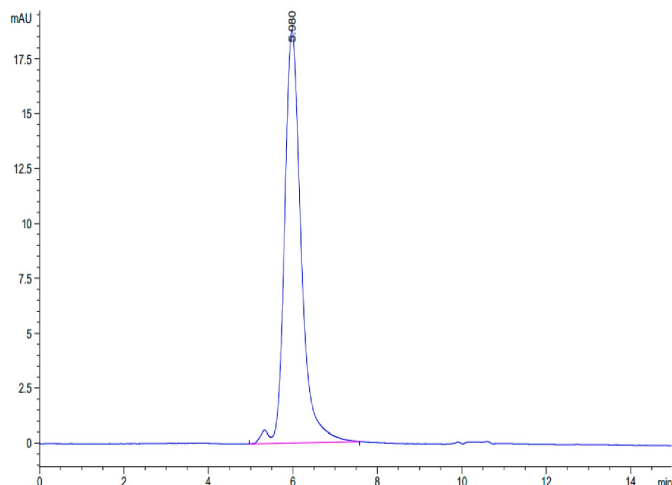
Tris-Bis PAGE



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

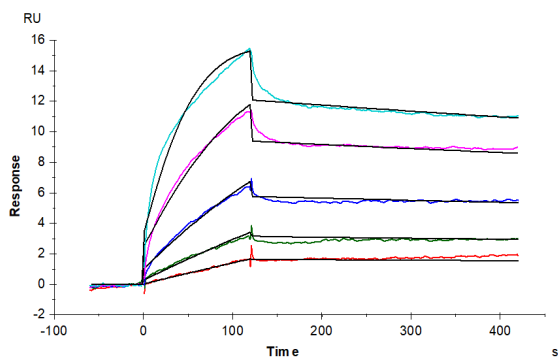
SEC-HPLC

Assay Data

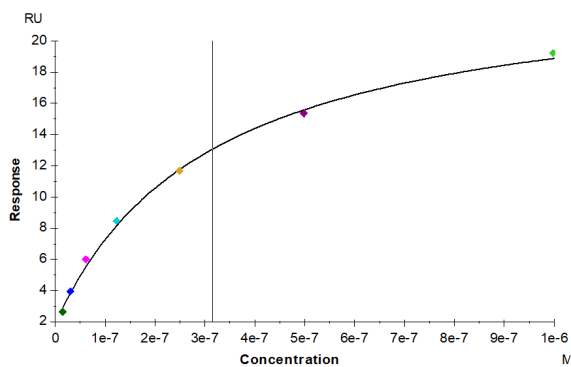


The purity of Human EGFR is greater than 95% as determined by SEC-HPLC.

SPR Data



Human EGFR, His Tag captured on CM5 Chip via Anti-His Antibody can bind Human EGF, No Tag with an affinity constant of 0.18 nM as determined in SPR assay (Biacore T200).



Human EGFR, His Tag captured on CM5 Chip via anti-his antibody can bind Human TGF-alpha, hFc Tag with an affinity constant of 0.31 μM as determined in SPR assay (Biacore T200).