

# Human EGF Protein

Cat. No. EGF-HM202

## Description

<b>Source</b>	Recombinant Human EGF Protein is expressed from HEK293 with hFc tag at the N-Terminus. It contains Asn971-Arg1023.
<b>Accession</b>	P01133-1
<b>Molecular Weight</b>	The protein has a predicted MW of 32.52 kDa. Due to glycosylation, the protein migrates to 38-43 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per µg by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

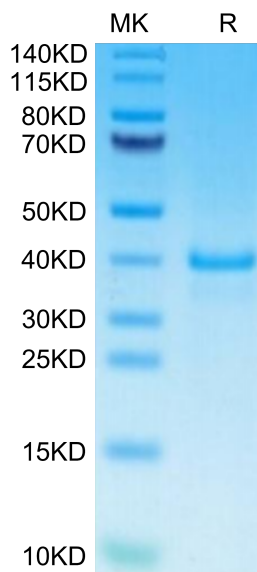
## Formulation and Storage

<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>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
<b>Storage</b>	-20 to -80°C for 12 months as supplied from date of receipt. -80°C for 3-6 months 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

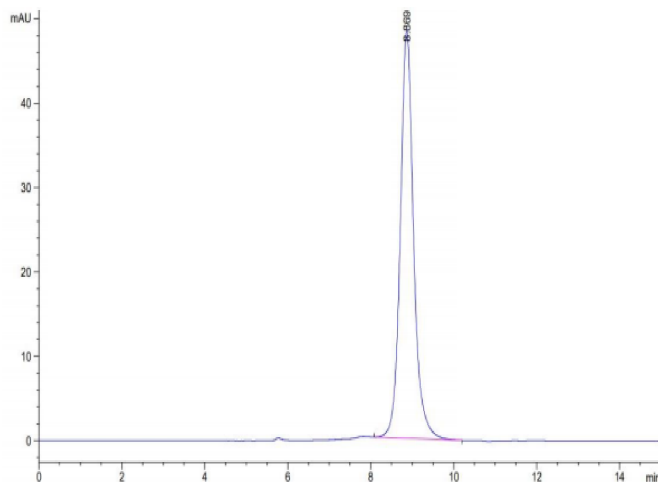
The epidermal growth factor (EGF) family of peptides encodes several proteins that can function as growth factors. The EGF-like peptides, with the exception of proteins of the EGF-CFC subfamily, bind and activate tyrosine kinase receptors that belong to the erbB family.

## Assay Data



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

Assay Data

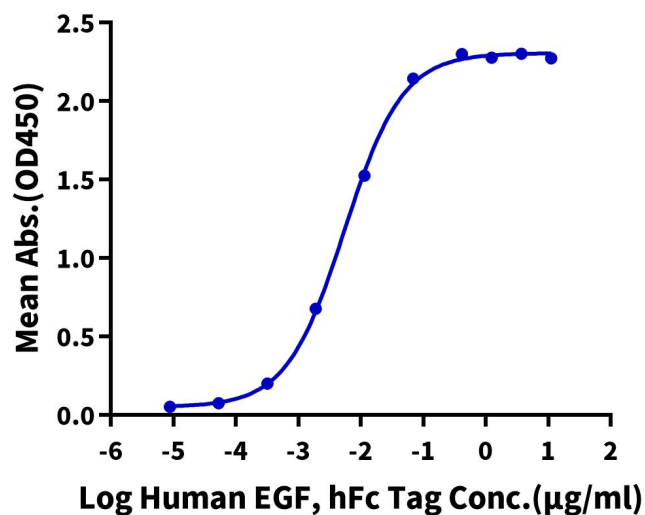


The purity of Human EGF is greater than 95% as determined by SEC-HPLC.

ELISA Data

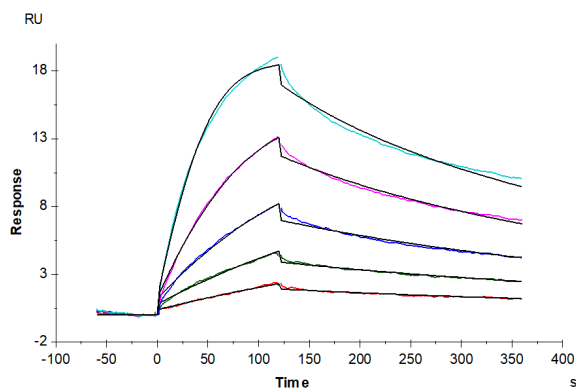
**Human EGF, hFc Tag ELISA**

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 5.5ng/ml determined by ELISA (QC Test).

SPR Data

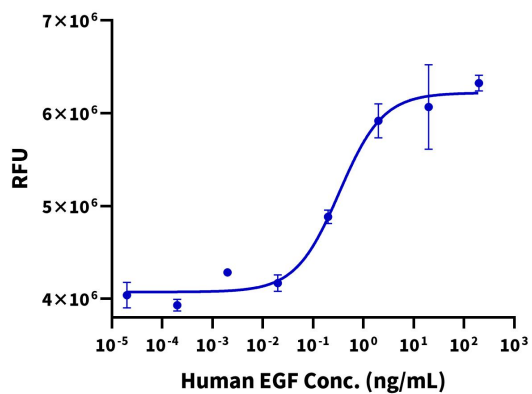


Human EGFR, His Tag captured on CM5 Chip via anti-his antibody can bind Human EGF, hFc Tag with an affinity constant of 0.39 nM as determined in SPR assay (Biacore T200).

Cell Based Assay

Assay Data

Recombinant Human EGF Bioactivity



Measured in a cell proliferation assay using Balb/C 3T3 mouse embryonic fibroblast cells. The ED50 for this effect is typically 0.2 - 1.5 ng/mL.