

# Human EGF Protein, Ultra Low Endotoxin

Cat. No. EGF-HE001-UL

## Description

<b>Source</b>	Recombinant Human EGF Protein is expressed from E.coli without tag. It contains Asn971-Arg1023.
<b>Accession</b>	P01133-1
<b>Molecular Weight</b>	The protein has a predicted MW of 5.6 kDa same as 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 > 90% as determined by HPLC

## Formulation and Storage

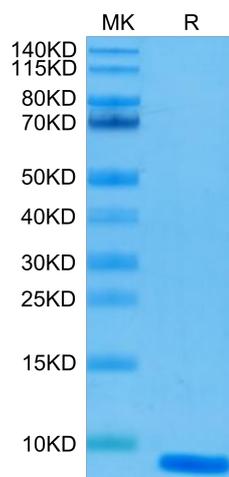
<b>Formulation</b>	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Dissolve the lyophilized protein in distilled water. Please refer to the Certificate of Analysis for detailed instructions.
<b>Storage</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 (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.

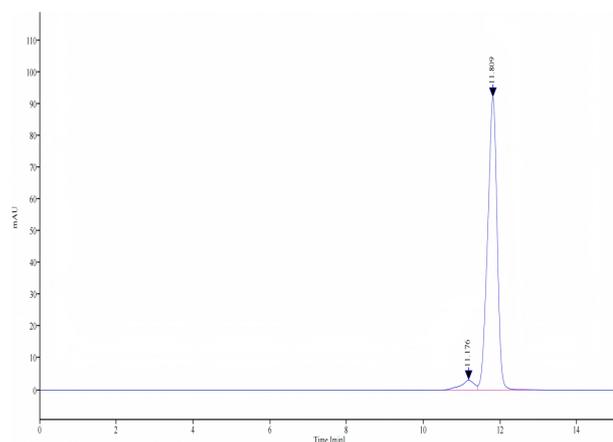
## Assay Data

### Bis-Tris PAGE



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

### SEC-HPLC

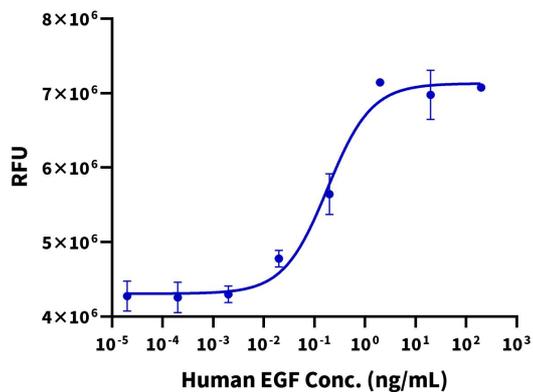


The purity of Human EGF is greater than 90% as determined by SEC-HPLC.

Assay Data

Cell Based Assay

Recombinant Human EGF Bioactivity

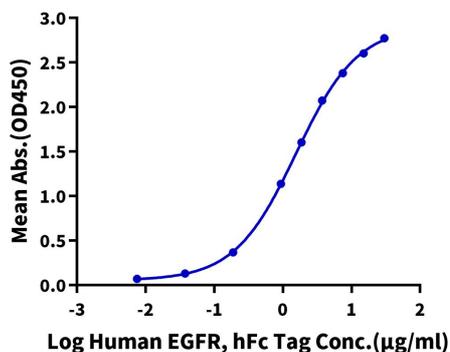


Measured in a cell proliferation assay using Balb/C 3T3 mouse embryonic fibroblasts. The ED50 for this effect is typically 0.1 - 0.2 ng/mL (QC Test).

ELISA Data

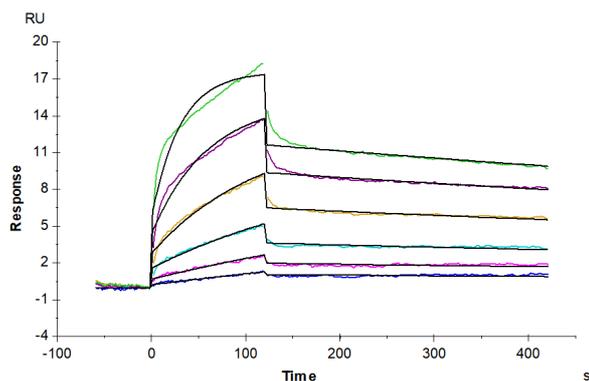
Human EGF, No Tag ELISA

0.5µg Human EGF, No Tag Per Well



Immobilized Human EGF, No Tag at 5µg/ml (100µl/well) on the plate. Dose response curve for Human EGFR, hFc Tag with the EC50 of 1.56µg/ml determined by ELISA (QC Test).

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 1.33 nM as determined in SPR assay (Biacore T200).