

# Human EGFRVIII Protein

Cat. No. EG8-HM154

## Description

<b>Source</b>	Recombinant Human EGFRVIII Protein is expressed from HEK293 with His tag and Avi tag at the N-Terminus. It contains Leu25-Ser378.
<b>Accession</b>	NP_001333870.1
<b>Molecular Weight</b>	The protein has a predicted MW of 41.6 kDa. Due to glycosylation, the protein migrates to 68-80 kDa based on Bis-Tris PAGE result.
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE > 95% as determined by HPLC

## Formulation and Storage

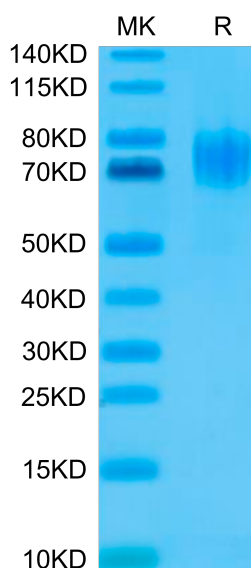
<b>Formulation</b>	Lyophilized from 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
<b>Reconstitution</b>	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 $\mu\text{g}/\text{ml}$ is recommended. 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 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 (EGFR) is overexpressed in a variety of human epithelial tumors, often as a consequence of gene amplification. Tumors with EGFR gene amplification frequently contain EGFR gene rearrangements, with the most common extracellular domain mutation being EGFRVIII. This mutation leads to a deletion of exons 2-7 of the EGFR gene and renders the mutant receptor incapable of binding any known ligand.

## Assay Data

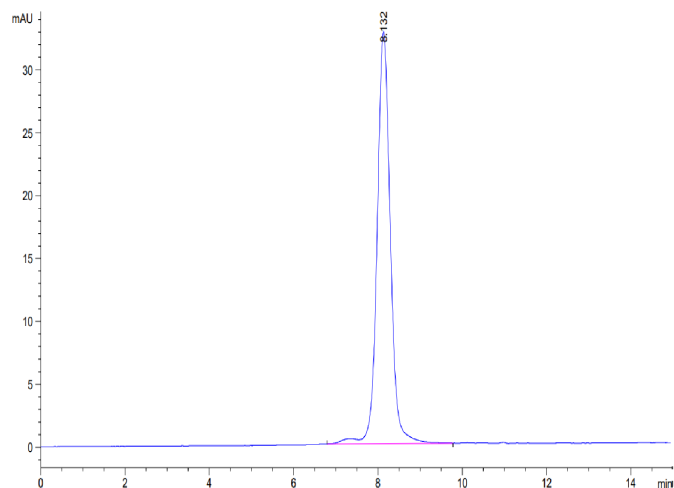
### Bis-Tris PAGE



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

### SEC-HPLC

Assay Data

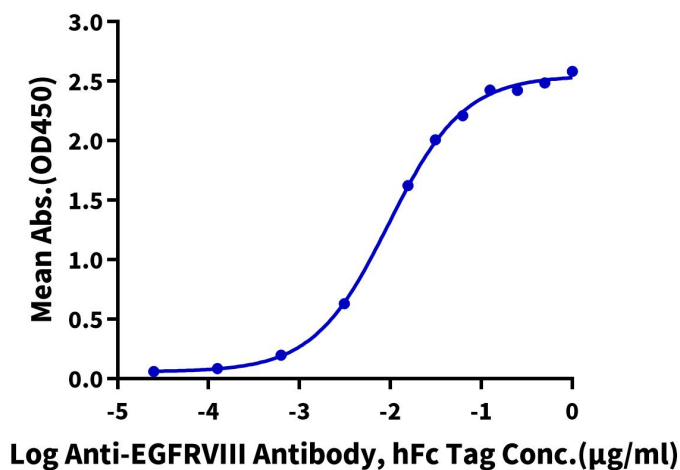


The purity of Human EGFRVIII is greater than 95% as determined by SEC-HPLC.

ELISA Data

**Human EGFRVIII, His Tag ELISA**

0.1µg Human EGFRVIII, His Tag Per Well



Immobilized Human EGFRVIII, His Tag at 1µg/ml (100µl/Well) on the plate. Dose response curve for Anti-EGFRVIII Antibody, hFc Tag with the EC50 of 9.6ng/ml determined by ELISA.