

# FITC-Labeled Human EGFRVIII Protein

Cat. No. EG8-HM154F

## Description

<b>Source</b>	Recombinant FITC-Labeled Human EGFRVIII Protein is expressed from HEK293 with His tag and Avi tag at the C-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>Wavelength</b>	Excitation Wavelength: 490 nm Emission Wavelength: 520 nm
<b>Endotoxin</b>	Less than 1EU per $\mu\text{g}$ by the LAL method.
<b>Purity</b>	> 95% as determined by Bis-Tris PAGE

## Formulation and Storage

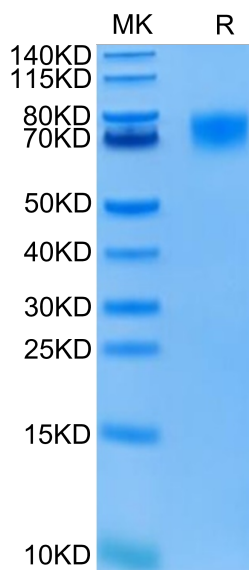
<b>Formulation</b>	Supplied as 0.22 $\mu\text{m}$ filtered solution in PBS (pH 7.4).
<b>Storage</b>	Valid for 6 months from date of receipt when stored at $-80^{\circ}\text{C}$ . Recommend to aliquot the protein into smaller quantities for optimal storage. Please minimize freeze-thaw cycles.

## 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



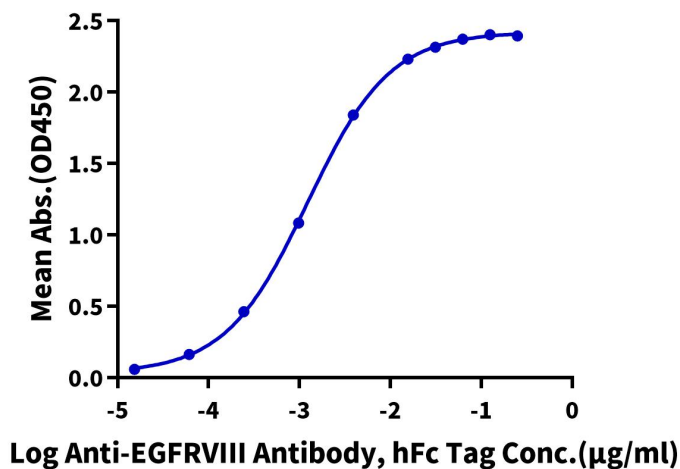
FITC-Labeled Human EGFRVIII on Bis-Tris PAGE under reduced condition. The purity is greater than 95%.

### ELISA Data

Assay Data

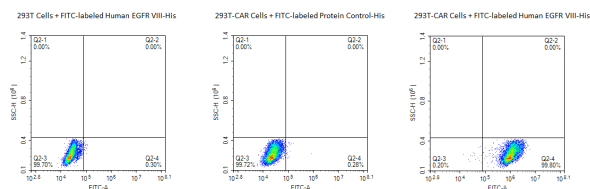
**FITC-Labeled Human EGFRVIII, His Tag ELISA**

0.05µg FITC-Labeled Human EGFRVIII, His Tag Per Well



Immobilized FITC-Labeled Human EGFRVIII, His Tag at 0.5µg/ml (100µl/well) on the plate. Dose response curve for Anti-EGFRVIII Antibody, hFc Tag with the EC50 of 1.2ng/ml determined by ELISA (QC Test).

FACS Data



FACS Analysis of Anti-EGFRVIII CAR Expression. 293T cells were transfected with anti-EGFRVIII-scFv and His tag. Cells were incubated with 5µg/ml FITC-Labeled Human EGFRVIII, His Tag and FITC-labeled protein control. Non-transfected 293T cells and FITC-labeled protein control were used as negative control.