

Biotinylated Human EGFRVIII Protein

Cat. No. EG8-HM154B

Description

Source	Recombinant Biotinylated Human EGFRVIII Protein is expressed from HEK293 with His tag and Avi tag at the C-Terminus. It contains Leu25-Ser378.
Accession	NP_001333870.1
Molecular Weight	The protein has a predicted MW of 41.6 kDa. Due to glycosylation, the protein migrates to 60-78 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

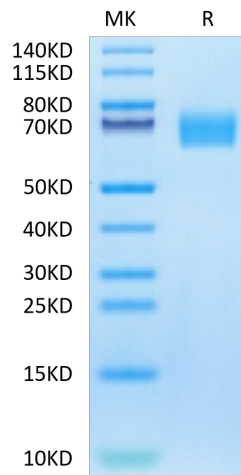
Formulation	Lyophilized from 0.22µm filtered solution in PBS (pH 7.4). Normally 8% trehalose is added as protectant before lyophilization.
Reconstitution	Centrifuge the tube before opening. Reconstituting to a concentration more than 100 µg/ml is recommended. Dissolve the lyophilized protein in distilled water.
Storage	-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 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

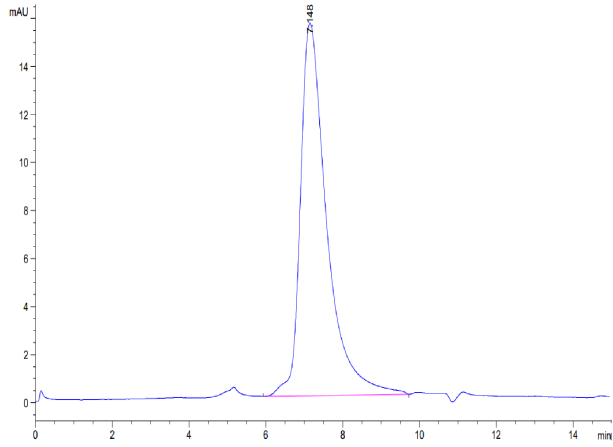
Tris-Bis PAGE



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

SEC-HPLC

Assay Data



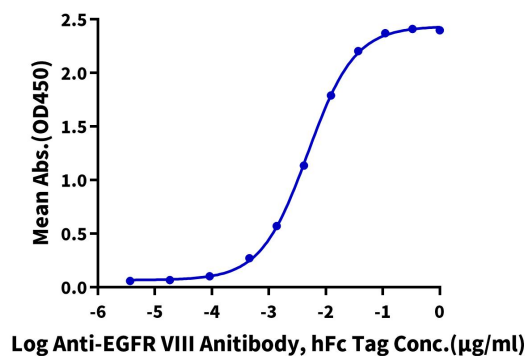
The purity of Biotinylated Human EGFRVIII is greater than 95% as determined by SEC-HPLC.

Assay Data

ELISA Data

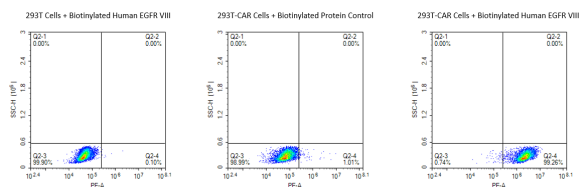
Biotinylated Human EGFRVIII, His Tag ELISA

0.05µg Biotinylated Human EGFRVIII, His Tag Per Well



Immobilized Biotinylated Human EGFRVIII, His Tag at 0.5µg/ml (100µl/Well) on streptavidin (5µg/ml) precoated plate. Dose response curve for Anti-EGFR VIII Anitibody, hFc Tag with the EC50 of 4.8ng/ml determined by ELISA (QC Test).

FACS Data



Use Biotinylated Human EGFRVIII, His Tag protein to detect the expression rate of Anti-EGFRVIII-CAR positive cell. 293T cells and anti-EGFRVIII CAR-293T cells were incubated with Biotinylated human EGFR VIII-His Tag. Non-transfected 293T cells and Biotinylated protein control were used as negative control. SA-PE was used to evaluate the binding activity of Biotinylated Human EGFR VIII.