

FITC-Labeled Human EGFRvIII Protein, His Tag

Catalog # EGI-HF2H7



Synonym

EGFRvIII

Source

FITC-Labeled Human EGFRvIII Protein, His Tag (EGI-HF2H7) is expressed from human 293 cells (HEK293). It contains AA Leu 25 - Ser 378 (Accession # [NP_001333870.1](#)). It is the FITC labeled form of Human EGFRvIII Protein, His Tag (EGI-H52H4).
Predicted N-terminus: Leu 25

Molecular Characterization

EGFRvIII(Leu 25 - Ser 378)
NP_001333870.1

Poly-his

This protein carries a polyhistidine tag at the C-terminus.
The protein has a calculated MW of 40.5 kDa. The protein migrates as 55-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

Conjugate

FITC
Excitation source: 488 nm spectral line, argon-ion laser
Excitation Wavelength: 488 nm
Emission Wavelength: 535 nm

Labeling

The primary amines in the side chains of lysine residues and the N-terminus of the protein are conjugated with FITC using standard chemical labeling method. The residual FITC is removed by molecular sieve treatment during purification process.

Protein Ratio

The FITC to protein molar ratio is 2-4.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 µm filtered solution in PBS, pH7.4 with trehalose as protectant.
Contact us for customized product form or formulation.

Reconstitution

Please see Certificate of Analysis for specific instructions.
For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.

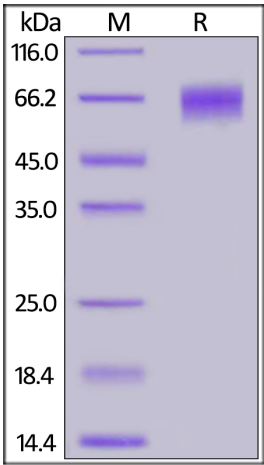
Storage

For long term storage, the product should be stored at lyophilized state at -20°C or lower.
Please protect from light and avoid repeated freeze-thaw cycles.

This product is stable after storage at:

- 20°C to -70°C for 12 months in lyophilized state;
- 70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



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FITC-Labeled Human EGFRvIII Protein, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

Background

The epidermal growth factor receptor (EGFR; ErbB-1; HER1 in humans) is the cell-surface receptor for members of the epidermal growth factor family (EGF-family) of extracellular protein ligands. The epidermal growth factor receptor is a member of the ErbB family of receptors, a subfamily of four closely related receptor tyrosine kinases: EGFR (ErbB-1), HER2/c-neu (ErbB-2), Her 3 (ErbB-3) and Her 4 (ErbB-4). Mutations affecting EGFR expression or activity could result in cancer.

The type III EGF deletion mutant receptor (EGFRvIII) is the most common mutation and was first identified in primary human glioblastoma tumors. This tumor-specific antigen is ligand-independent, contains a constitutively active tyrosine kinase domain, and has been shown to be present in a number of human malignancies. EGFRvIII has been selected as a target for CAR-modified T-cell studies in recent years.

