FITC-Labeled Human EGF R Protein, His Tag

Catalog # EGR-HF2H5

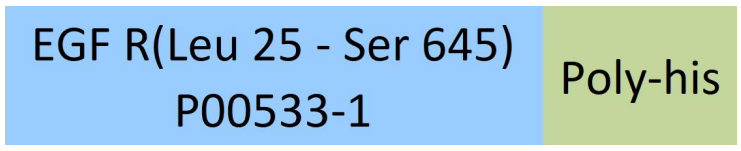
Synonym

EGFR,ERBB,ERBB1,HER1,PIG61,mENA

Source

FITC-Labeled Human EGF R, His Tag (EGR-HF2H5) is expressed from human 293 cells (HEK293). It contains AA Leu 25 - Ser 645 (Accession # P00533-1). It is the FITC labeled form of Human EGF R, His Tag (EGR-H5222).
Predicted N-terminus: Leu 25

Molecular Characterization



This protein carries a polyhistidine tag at the C-terminus.

The protein has a calculated MW of 70.5 kDa. The protein migrates as 85-105 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 ***2-3.5***.

Purity

>95% 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

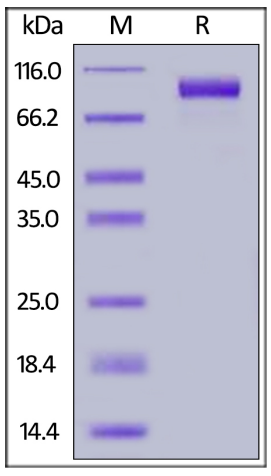
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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.

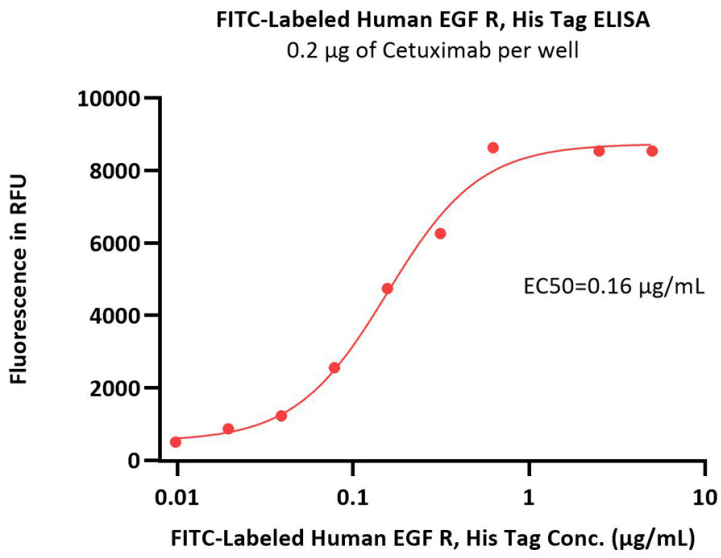
SDS-PAGE



FITC-Labeled Human EGF R, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein

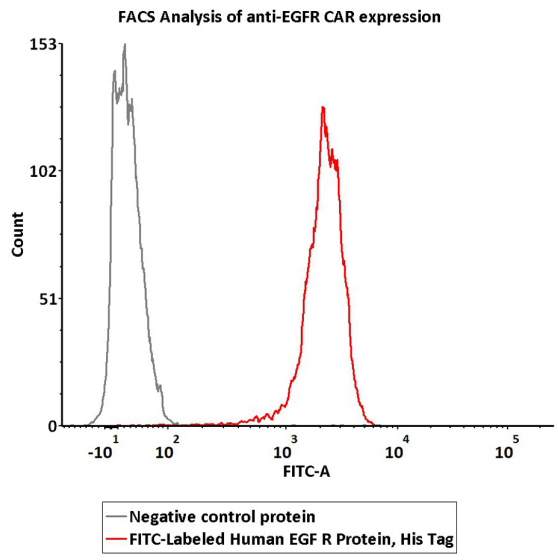
is greater than 95%.

Bioactivity-ELISA



Immobilized Cetuximab at 2 μg/mL (100 μL/well) can bind FITC-Labeled Human EGF R, His Tag (Cat. No. EGR-HF2H5) with a linear range of 0.039-0.313 μg/mL (QC tested).

Bioactivity-FACS



2e5 of Anti-EGFR CAR-293 cells were stained with 100 μL of 1 μg/mL of FITC-Labeled Human EGF R Protein, His Tag (Cat. No. EGR-HF2H5) and negative control protein respectively, FITC signal was used to evaluate the binding activity (QC tested).

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.