

## **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**

EGF R(Leu 25 - Ser 645) P00533-1

Poly-his

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.

## **Endotoxin**

Less than 1.0 EU per µg by the LAL method.

## **Purity**

>95% as determined by SDS-PAGE.

#### **Formulation**

Lyophilized from 0.22  $\mu m$  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 $^{\circ}$ 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.

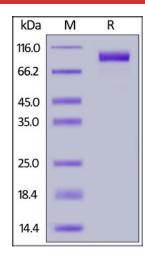
**SDS-PAGE** 



# FITC-Labeled Human EGF R Protein, His Tag

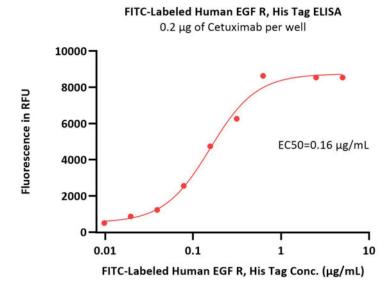
Catalog # EGR-HF2H5





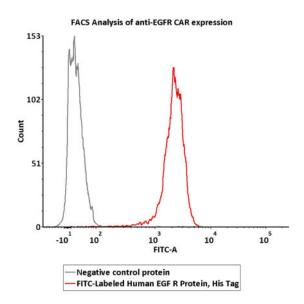
FITC-Labeled Human EGF R, His Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 95%.

# **Bioactivity-ELISA**



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

## **Bioactivity-FACS**



2e5 of Anti-EGFR CAR-293 cells were stained with 100  $\mu$ L of 1  $\mu$ g/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).



# FITC-Labeled Human EGF R Protein, His Tag

Catalog # EGR-HF2H5



# **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.

# **Clinical and Translational Updates**

Please contact us via <u>TechSupport@acrobiosystems.com</u> if you have any question on this product.

