

Synonym

EGFR,ERBB,ERBB1,HER1,PIG61,mENA

Source

PE-Labeled Human EGF R Protein, His Tag (EGR-HP2H7) is produced via conjugation of PE to Human EGF R Protein, His Tag with a new generation site-specific technology under Star Staining labeling platform. Human EGF R Protein, His Tag is expressed from human 293 cells (HEK293). It contains AA Leu 25 - Ser 645 (Accession # [P00533-1](#)).
Predicted N-terminus: Leu 25

Molecular Characterization

This protein carries a polyhistidine tag at the C-terminus

The protein has a calculated MW of 82.9 kDa.

Conjugate

PE

Excitation Wavelength: 488 nm / 561 nm

Emission Wavelength: 575 nm

Endotoxin

Less than 1.0 EU per μg by the LAL method.

Purity

>90% as determined by SDS-PAGE.

Formulation

Lyophilized from 0.22 μm filtered solution in PBS, 0.2% BSA, 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.

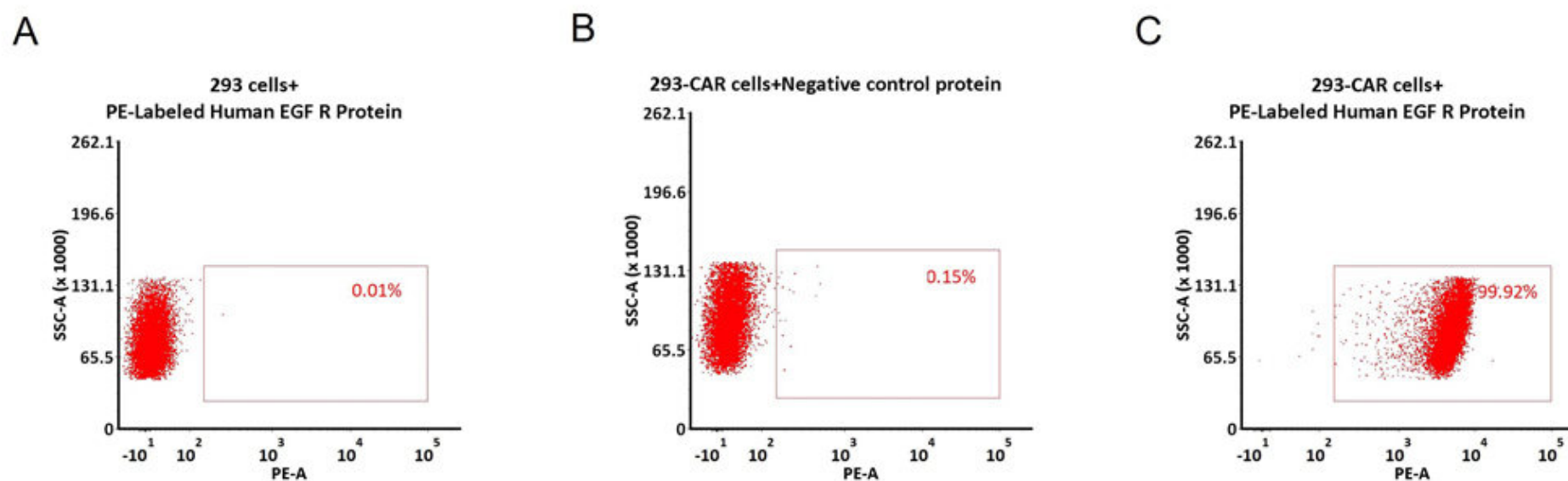
Please protect from light and avoid repeated freeze-thaw cycles.

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.

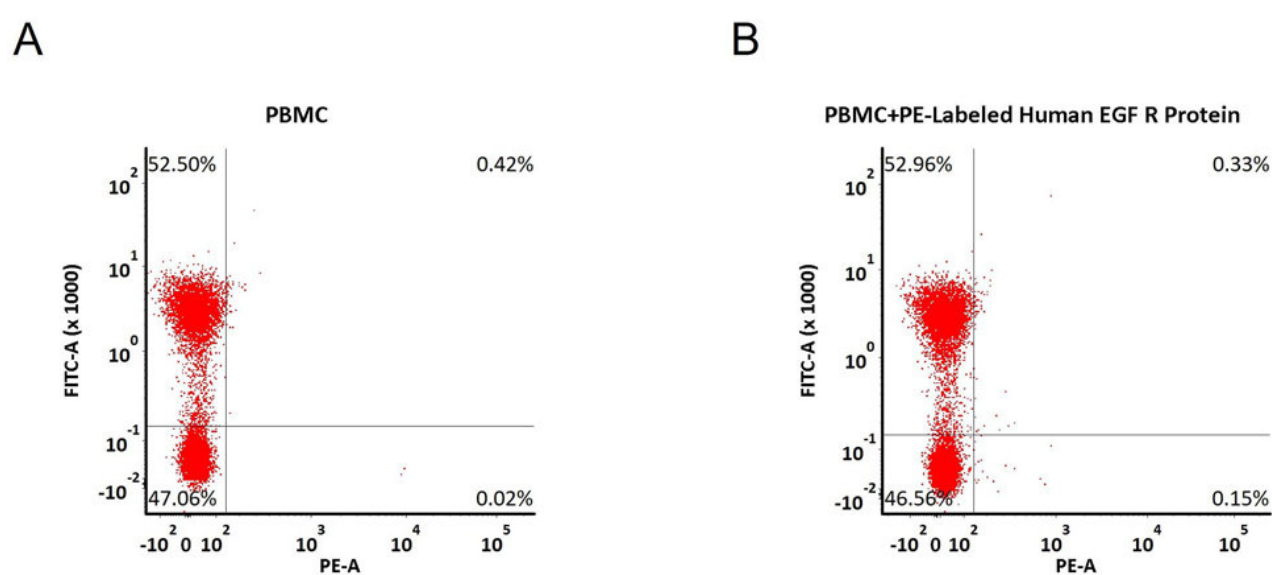
Evaluation of CAR expression

FACS Analysis of Anti-EGF R CAR Expression



5×10^5 of anti-EGFR CAR-293 cells were stained with 100 μL of 1:50 dilution (2 μL stock solution in 100 μL FACS buffer) of PE-Labeled Human EGF R Protein, His Tag (Cat. No. EGR-HP2H7) and negative control protein respectively (Fig. C and B), and non-transfected 293 cells were used as a control (Fig. A). PE signal was used to evaluate the binding activity (QC tested).

FACS Analysis of Non-specific binding to PBMCs



5e5 of PBMCs were stained with PE-Labeled Human EGF R Protein, His Tag (Cat. No. EGR-HP2H7) and anti-CD3 antibody, washed and then analyzed with FACS. FITC signal was used to evaluate the expression of CD3⁺ T cells in PBMCs, and PE signal was used to evaluate the non-specific binding activity to PBMCs (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.

Clinical and Translational Updates

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