

Synonym

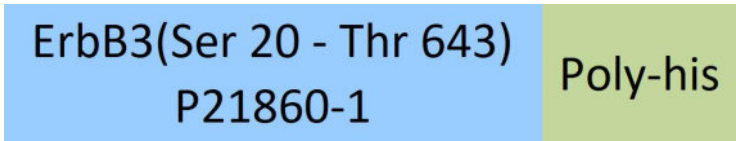
ERBB3,HER3,LCCS2,MDA-BF-1,MGC88033,c-erbB3,erbB3-S,p180-ErbB3,p45-sErbB3,p85-sErbB3

Source

FITC-Labeled Human ErbB3, His Tag (ER3-HF2H5) is expressed from human 293 cells (HEK293). It contains AA Ser 20 - Thr 643 (Accession # [P21860-1](#)).

It is the FITC labeled form of Human ErbB3, His Tag (ER3-H5223).

Predicted N-terminus: Ser 20

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 80-90 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.

Endotoxin

Less than 1.0 EU per µg by the LAL method.

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

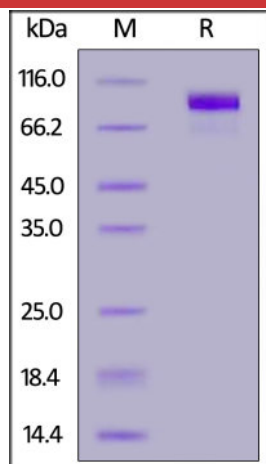
For long term storage, the product should be stored at lyophilized state at -20°C or lower.

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

This product is stable after storage at:

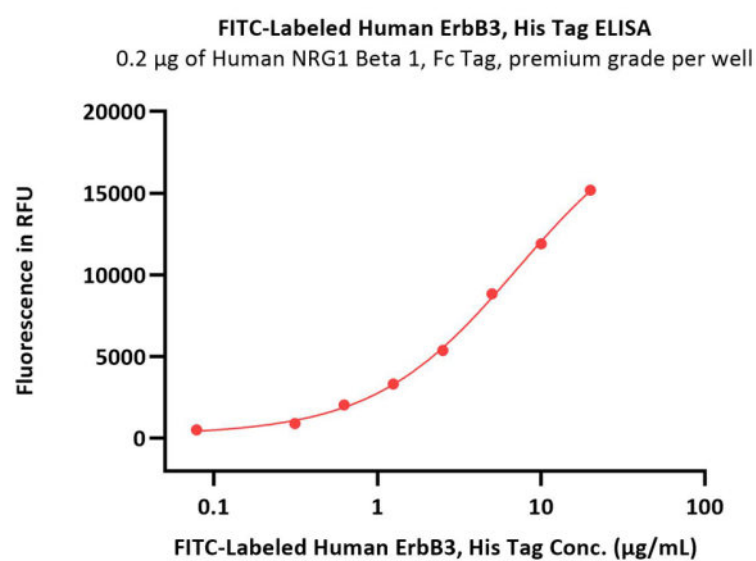
- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

SDS-PAGE



FITC-Labeled Human ErbB3, 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 Human NRG1 Beta 1, Fc Tag, premium grade (Cat. No. NR1-H5268) at 2 µg/mL (100 µL/well) can bind FITC-Labeled Human ErbB3, His Tag (Cat. No. ER3-HF2H5) with a linear range of 0.625-20 µg/mL (QC tested).

Background

ErbB3, also known as Her3 (human epidermal growth factor receptor 3), is a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound glycoprotein has a neuregulin binding domain but has not an active kinase domain. It therefore can bind the ligand but cannot mediate the intracellular signal transduction through protein phosphorylation. However, it does form heterodimers with ErbB2 or other EGFR members responsible for tyrosine phosphorylation to give a receptor complex and initiate the related pathway, which lead to cell proliferation or differentiation. Overexpression of this protein has been reported in numerous cancers, including prostate, bladder, and breast tumors. This protein has different isoforms derived from alternative splicing variants, and among which, the secreted isoform lacking the intermembrane region modulates the activity of membrane-bound form.

Clinical and Translational Updates

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