

## Recombinant Protein Technical Manual

# Recombinant Human HER3/ErbB3 Protein (His Tag)(Active) RPES0427

#### Product Data:

**Product SKU:** RPES0427 **Size:** 10μg

Species: Human Expression host: HEK293 Cells

**Uniprot:** NP 001973.2

#### **Protein Information:**

Molecular Mass: 70.2 kDa

AP Molecular Mass: 10010 kDa

Tag: C-His

**Bio-activity:** Measured by its binding ability in a functional ELISA. Immobilized human ErbB3 at

2 μg/mL (100 μl/well) can bind human NRG1 (isoform Beta1), The EC50 of human

NRG1 (isoform Beta1) is 0.43 µg/mL.

**Purity:** > 95 % as determined by reducing SDS-PAGE.

**Endotoxin:** < 1.0 EU per μg as determined by the LAL method.

**Storage:** Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C.

Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of

reconstituted samples are stable at < -20°C for 3 months.

**Shipping:** This product is provided as lyophilized powder which is shipped with ice packs.

**Formulation:** Lyophilized from sterile PBS, pH 7.5

**Reconstitution:** Please refer to the printed manual for detailed information.

**Application:** Functional ELISA

**Synonyms:** c-erbB-3;c-erbB3;EEBB3;ErbB-3;erbB3-S;HER3;LCCS2;MDA-BF;p180-ErbB3;p45-

sErbB3;p85-sErbB3

## Immunogen Information:

Sequence: Met 1-Thr 643

## **Background:**

ErbB3, also known as Her3(human epidermal growth factor receptor3), 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. , and therefore can not mediate the intracellular signal transduction through protein phosphorylation. However, its heterodimer with ErbB2 or other EGFR members responsible for tyrosine phosphorylation forms a receptor complex with high affinity, and initiates the related pathway which lead to cell proliferation or differentiation. ErbB3 has been shown to implicated 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.