

Recombinant Protein Technical Manual

Recombinant Rat HER3/ErbB3 Protein (His Tag)(Active) RPES5186

Product Data:

Product SKU: RPES5186 **Size:** 50μg

Species: Rat Expression host: HEK293 Cells

Uniprot: Q3MHC0

Protein Information:

Molecular Mass: 69.9 kDa

AP Molecular Mass: 112 kDa

Tag: C-His

Bio-activity: Measured by its binding ability in a functional ELISA. Immobilized rat ERBB3-His at

10 $\mu g/ml$ (100 $\mu l/well$) can bind biotinylated human NRG1 , The EC50 of

biotinylated human NRG1 is 1.1-2.6 µg/ml.

Purity: > 95 % as determined by SDS-PAGE

Endotoxin: $< 1.0 \text{ EU per } \mu \text{g of the protein as determined by the LAL method}$

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 7.4

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

Application: Functional ELISA

Synonyms: ERBB3

Immunogen Information:

Sequence: Met1-His641

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.