



Recombinant Protein Technical Manual

Recombinant Human HER3/ErbB3 Protein (aa 730065, His & GST Tag)(Active)
RPES0407

Product Data:

Product SKU: RPES0407

Size: 20µg

Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: NP_001973.2

Protein Information:

Molecular Mass: 65 kDa

AP Molecular Mass: 65 kDa

Tag: N-His-GST

Bio-activity: 1. No Kinase Activity 2. Using the Octet RED System, the affinity constant (Kd) of human ErBB3-GST bound to human NRG1 (aa 2-224) was 20 nM.

Purity: > 75 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg 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 50mM Tris, 100mM NaCl, pH 7.5, 10% gly, 1mM GSH

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

Application:

Synonyms: c-erbB-3;c-erbB3;EEBB3;ErbB-3;erbB3-S;HER3;LCCS2;MDA-BF;p180-ErbB3;p45-sErbB3;p85-sErbB3

Immunogen Information:

Sequence: Pro 730-Ser 1065

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.