

Recombinant Protein Technical Manual Recombinant Rat HER2/ErbB2 Protein (aa 4-656, His Tag) RPES0121

Product Data:

Product SKU: RPES0121 **Size:** 50μg

Species: Rat Expression host: HEK293 Cells

Uniprot: AAH61863.1

Protein Information:

Molecular Mass: 71.3 kDa

AP Molecular Mass:

Tag: C-His

Bio-activity:

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:

Synonyms: Receptor tyrosine-protein kinase erbB-2; Epidermal growth factor receptor-

related protein; Proto-oncogene Neu; Proto-oncogene c-ErbB-2; p185erbB2; p185neu; CD340; ERBB2;ENV;ENVW;ERVWE1;HER-2;HER-2/neu;HER2;HERV-

7q;HERV-W-ENV;HERV7Q;HERVW;HERVWENV;MLN 19;MLN19

Immunogen Information:

Sequence: Met 4-Thr 656

Background:

Epidermal growth factor receptor 2 (HER2), also known as ErbB2, NEU, and CD340, is a type I membrane glycoprotein, and belongs to the epidermal growth factor (EGF) receptor family. HER2 protein cannot bind growth factors due to the lacking of ligand binding domain of its own and autoinhibited constitutively. However, HER2 forms a heterodimer with other ligand-bound EGF receptor family members, therefore stabilizes ligand binding and enhances kinase-mediated activation of downstream molecules. HER2 plays a key role in development, cell proliferation and differentiation. HER2 gene has been reported to associate with malignancy and a poor prognosis in numerous carcinomas, including breast, prostate, ovarian, lung cancers and so on.