



Recombinant Protein Technical Manual

Recombinant Human HER2/ErbB2 Protein (His Tag)

RPES3652

Product Data:

Product SKU: RPES3652

Size: 10µg

Species: Human

Expression host: Human Cells

Uniprot: P04626

Protein Information:

Molecular Mass: 70.1 kDa

AP Molecular Mass: 10015 kDa

Tag: C-6His

Bio-activity:

Purity: > 90 % 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 a 0.2 µm filtered solution of PBS, pH7.4.

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

Application:

Synonyms: Receptor tyrosine-protein kinase erbB-2; Metastatic lymph node gene 19 protein; Proto-oncogene Neu; Tyrosine kinase-type cell surface receptor HER2; ERBB2; MLN19; NGL; TKR1; CD340; ENV; ENVW; ERVWE1; HER-2; HER-2/neu; HER2; HERV-7q; HERV-W-ENV; HERV7Q; HERVW; HERVWENV; MLN 19; TKR1

Immunogen Information:

Sequence: Thr 23-Thr652

Background:

Human epidermal growth factor receptor 2 (HER2) is a type of membrane glycoprotein, and belongs to the epidermal growth factor (EGF) receptor family. HER2 plays a key role in development, cell proliferation and differentiation. HER2 has been reported to associate with malignancy and a poor prognosis in numerous carcinomas, including breast, prostate, ovarian, lung cancers and so on. HER2 is activated by dimerization and not activated by EGF, TGF-alpha and amphiregulin. Interaction with PTK6 increases its intrinsic kinase activity. It is heterodimer with EGFR, ERBB3 and ERBB4. HER2 associates with the 5'-TCAAATTC-3' sequence in the PTGS2/COX-2 promoter and activates its transcription. It implicated in transcriptional activation of CDKN1A and the function of the protein involves STAT3 and SRC. And also it involved in the transcription of rRNA genes by RNA Pol I and enhances protein synthesis and cell growth.