



## Recombinant Protein Technical Manual

**Recombinant Rat HER2/ErbB2 Protein (aa 67-323,  
His Tag)**  
RPES2568

### Product Data:

**Product SKU:** RPES2568

**Size:** 10µg

**Species:** Rat

**Expression host:** E. coli

**Uniprot:** P06494

### Protein Information:

**Molecular Mass:** 29.3 kDa

**AP Molecular Mass:** 32 kDa

**Tag:** C-6His

**Bio-activity:**

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

**Endotoxin:** < 1.0 EU per µg as determined by 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 20mM Tris, 150mM NaCl, 4M Urea, pH 8.0.

**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:** Ala67-Val323

## Background:

ERBB2 belongs to the protein kinase superfamily, Tyr protein kinase family and EGF receptor subfamily. It contains a protein kinase domain. ERBB2 is widely expressed in epithelial cells, and amplification and/or overexpression of ErbB2 has been reported associated with malignancy and a poor prognosis in numerous carcinomas, including breast, prostate and ovarian cancers. Rat ERBB2 is an essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. ErbB2 mediates signalling pathways which involve mitogen-activated protein kinase and phosphatidylinositol-3 kinase, this receptor plays a key role in development, cell proliferation and differentiation.