



## RayBiotech, Inc.

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# Certificate of Analysis and Data Sheet Recombinant Human Tyrosine Kinase ErbB-2

**Catalog No.**  
228-10409

**Source:**  
*Escherichia Coli.*

### **Synonyms**

NEU, NGL, HER2, TKR1, HER-2, c-erb B2, HER-2/neu, Receptor tyrosine-protein kinase erbB-2, EC 2.7.10.1, p185erbB2, C-erbB-2, NEU proto-oncogene, Tyrosine kinase-type cell surface receptor HER2, MLN 19, CD340 antigen.

### **Introduction**

HER-2/neu (erbB-2) encodes an 185-kDa orphan receptor tyrosine kinase that is constitutively active as a dimer and displays potent oncogenic activity when overexpressed. Herstatin, as the product of alternative HER-2 transcript, retains intron 8.

The herstatin mRNA is expressed in normal human fetal kidney and liver, but is at reduced levels relative to p185HER-2 mRNA in carcinoma cells that contain an amplified HER-2 gene. Herstatin appears to be an inhibitor of p185HER-2, because it disrupts dimers, reduces tyrosine phosphorylation of p185, and inhibits the anchorage-independent growth of transformed cells that overexpress HER-2.

### **Description**

ErbB-2 Human Recombinant is a 43.4 kDa protein containing 397 amino acid residues of the human Herstatin, and an extra Methionine at N-Terminal (underlined), produced in E.coli.

The ErbB2 is purified by proprietary chromatographic techniques.

### **Physical Appearance**

Filtered White lyophilized (freeze-dried) powder.

### **Formulation**

Filtered and lyophilized from 0.5 mg/ml in 0.05M Acetate buffer pH-4.

### **Solubility**

Add deionized H<sub>2</sub>O to a concentration of 0.5m/ml and let the lyophilized pellet dissolve completely. The protein requires 20 min at 37°C for complete reconstitution.

For conversion into higher pH value, we recommend intensive dilution by relevant buffer to a concentration of 10 µg/ml. In higher concentrations the solubility of this antigen is limited. Product is not sterile. Please filter the product by an appropriate sterile filter before using it in cell culture.

It is recommended to add 5mM DTT and 0.1-0.15M NaCl before freezing in order to prevent potential aggregation.

**The products are furnished for LABORATORY RESEARCH USE ONLY.  
Not for diagnostic or therapeutic use.**



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### ***Stability***

Store lyophilized protein at -20°C. Aliquot the product after reconstitution to avoid repeated freezing/thawing cycles. Reconstituted protein can be stored at 4°C for a limited period of time. The lyophilized protein remains stable until the expiry date when stored at -20°C.

### ***Specificity***

The amino acid sequence of the recombinant human herstatin is 100% homologous to the amino acid sequence of the human herstatin without signal sequence.

### ***Purification Method***

Two-step procedure using size exclusion chromatography before and after refolding.

### ***Applications***

Western blotting.

### ***Amino Acid Sequence***

MTQVCTGTDM	KLRLPASPET	HLDMLRHLYQ	GCQVVQGNLE	LTYLPTNASL
SFLQDIQEVQ	GYVLIAHNQV	RQVPLQRLRI	VRGTQLFEDN	YALAVLDNGD
PLNNTTPVTG	ASPGGLRELQ	LRSLTEILKG	GVLIQRNPQL	CYQDTILWKD
IFHKNNQLAL	TLIDTNRSRA	CHPCSPMCKG	SRCWGESSED	CQSLTRTVCA
GGCARCKGPL	PTDCCHEQCA	AGCTGPKHSD	CLACLFHNHS	GICELHCPAL
VTYNTDTFES	MPNPEGRTYF	GASCVTACPY	NYLSTDVGSC	TLVCPLHNQE
VTAEDGTQRC	EKCSKPCARG	THSLPPRPAA	VPVPLRMQPG	PAHPVLSFLR
PSWDLVSAFY	SLPLAPLSPT	SVPISPVSVG	RGPDPAHVA	VDLSRYEG.

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