

## Product datasheet for RC212583L4

#### OriGene Technologies, Inc.

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# Her2 (ERBB2) (NM\_004448) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Her2 (ERBB2) (NM\_004448) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: Her2

Synonyms: CD340; HER-2; HER-2/neu; HER2; MLN 19; NEU; NGL; TKR1

Mammalian Cell Puromycin

Selection:

**Vector:** pLenti-C-mGFP-P2A-Puro (PS100093)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC212583).

Sequence:

Restriction Sites: Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_004448

ORF Size: 3765 bp



#### Her2 (ERBB2) (NM\_004448) Human Tagged Lenti ORF Clone - RC212583L4

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of

reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing

variants is recommended prior to use. More info

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression

varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube

containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:** 1. Centrifuge at 5,000xg for 5min.

2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.

3. Close the tube and incubate for 10 minutes at room temperature.

4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid

at the bottom.

5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of

shipping when stored at -20°C.

**RefSeq:** <u>NM 004448.2</u>

 RefSeq Size:
 4624 bp

 RefSeq ORF:
 3768 bp

 Locus ID:
 2064

 UniProt ID:
 P04626

Cytogenetics: 17q12

**Domains:** Recep\_L\_domain, pkinase, TyrKc, S\_TKc, YLP, Furin-like, FU

**Protein Families:** Druggable Genome, Protein Kinase, Transmembrane

**Protein Pathways:** Adherens junction, Bladder cancer, Calcium signaling pathway, Endometrial cancer, ErbB

signaling pathway, Focal adhesion, Non-small cell lung cancer, Pancreatic cancer, Pathways in

cancer, Prostate cancer

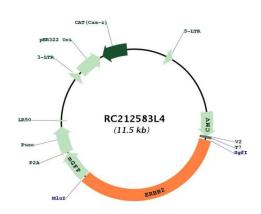
**MW:** 137.7 kDa



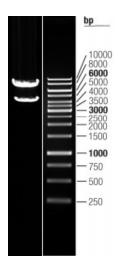
#### **Gene Summary:**

This gene encodes a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. This protein has no ligand binding domain of its own and therefore cannot bind growth factors. However, it does bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways, such as those involving mitogen-activated protein kinase and phosphatidylinositol-3 kinase. Allelic variations at amino acid positions 654 and 655 of isoform a (positions 624 and 625 of isoform b) have been reported, with the most common allele, Ile654/Ile655, shown here. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors. Alternative splicing results in several additional transcript variants, some encoding different isoforms and others that have not been fully characterized. [provided by RefSeq, Jul 2008]

### **Product images:**



Circular map for RC212583L4



Double digestion of RC212583L4 using Sgfl and Mlul