

Product datasheet for RC402729

Her2 (ERBB2) (NM_004448) Human Mutant ORF Clone

Product data:

Product Type:	Mutant ORF Clones
Product Name:	Her2 (ERBB2) (NM_004448) Human Mutant ORF Clone
Mutation Description:	I655V
Affected Codon#:	655
Affected NT#:	1963
Nucleotide Mutation:	ERBB2 Mutant (I655v), Myc-DDK-tagged ORF clone of Homo sapiens v-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian) (ERBB2), transcript variant 1 as transfection-ready DNA
Effect:	Breast cancer, increased risk, association with
Symbol:	ERBB2
Synonyms:	CD340; HER-2; HER-2/neu; HER2; MLN 19; NEU; NGL; TKR1
E. coli Selection:	Kanamycin (25 ug/mL)
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
Tag:	Myc-DDK
ACCN:	NM_004448
ORF Size:	3765 bp
Restriction Sites:	Sgfl-MluI
ORF Nucleotide Sequence:	>RC402729 representing NM_004448 Red=Cloning site Blue=ORF Green=Tags(s)

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CAGCTTCGAAGCCTCACAGAGATCTTGAAGGAGGGTCTTGATCCAGCGGAACCCCCAGCTCTGCTACC
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 TGGATTACAAGGATGACGACGA TAAGGTTTAA

Protein Sequence: >RC402729 representing NM_004448
 Red=Cloning site Green=Tags(s)

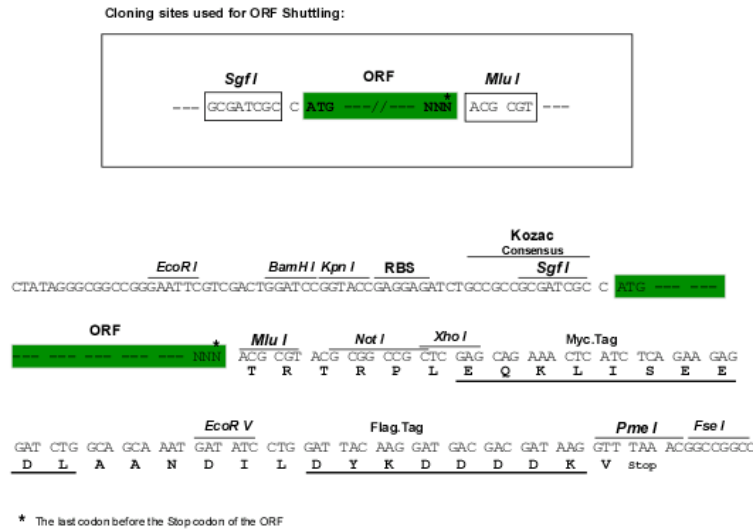
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 PSETDGYVAPLTCSPQPEYVNQPDVRPQPPSPREGPLAARPAGAT LERPKT LSPGKNGVVKDVFAFGGA
 VENPEYLTPQGGAAPQHPPPAFSPA FDNLYYWDQDPPPERGAPPSTFKGTPTAENPEYLGLDVPV

SGPTRRRRLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
OTI Annotation:	<p>This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.</p>
Components:	<p>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).</p>
RefSeq:	<p>NP_004439</p>
RefSeq Size:	<p>3765 bp</p>
RefSeq ORF:	<p>3768 bp</p>
Locus ID:	<p>2064</p>
Cytogenetics:	<p>17q12</p>
Domains:	<p>Recep_L_domain, pkinase, TyrKc, S_TKc, YLP, Furin-like, FU</p>
Protein Families:	<p>Druggable Genome, Protein Kinase, Transmembrane</p>
Protein Pathways:	<p>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</p>
MW:	<p>138.1 kDa</p>
Gene Summary:	<p>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]</p>