

Product datasheet for **RG239056**

Her2 (ERBB2) (NM_001289938) Human Tagged ORF Clone

Product data:

| | |
|---------------------------|---|
| Product Type: | Expression Plasmids |
| Product Name: | Her2 (ERBB2) (NM_001289938) Human Tagged ORF Clone |
| Tag: | TurboGFP |
| Symbol: | ERBB2 |
| Synonyms: | CD340; HER-2; HER-2/neu; HER2; MLN 19; NEU; NGL; TKR1 |
| Mammalian Cell Selection: | Neomycin |
| Vector: | pCMV6-AC-GFP (PS100010) |
| E. coli Selection: | Ampicillin (100 ug/mL) |



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ORF Nucleotide Sequence:

>RG239056 representing NM_001289938.
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGCGACTG
GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC
ATGAAGCTGCGGCTCCCTGCCAGTCCCAGACCCACCTGGACATGCTCCGCCACCTCTACCAGGGCTGC
CAGGTGGTGCAGGAAACCTGGAATCACCTACCTGCCACCAATGCCAGCCTGTCTTCTGCAGGAT
ATCCAGGAGGTGCAGGGCTACGTGCTCATCGCTACAACCAAGTGAAGCAGGTCCCAGTGCAGAGGCTG
CGGATTGTGCGAGGCACCCAGCTCTTTGAGGACAACATATGCCCTGGCCGTGCTAGACAATGGAGACCCG
CTGAACAATACCACCCCTGTACAGGGGCTCCCAGGAGGCTGCGGGAGCTGCAGCTTGAAGCCTC
ACAGAGATCTTGAAGGAGGGTCTTGTCCAGCGGAACCCAGCTCTGCTACCAGGACACGATTTTG
TGAAGGACATCTCCACAAGAACAACAGCTGGCTCTCACACTGATAGACCAACCGCTCTCGGGCC
TGCCACCCCTGTTCTCCGATGTGAAGGGCTCCCGCTGCTGGGGAGAGATTCTGAGGATTGTCAGAGC
CTGACCGCAGTGTCTGTGCCGGTGGCTGTGCCCGCTGCAAGGGGCCACTGCCACTGACTGCTGCCAT
GAGCAGTGTGCTGCCGGTGCACGGGCCCAAGCACTCTGACTGCCTGGCTGCCTCCACTCAACCAC
AGTGGCATCTGTGAGCTGCACTGCCAGCCCTGGTCACTACAACACAGACAGTTTGTAGTCCATGCC
AATCCCGAGGGCCGGTATACATTCGCGCCAGCTGTGTGACTGCCTGTCCCTACAACACTACCTTTCTACG
GACGTGGGATCCTGCACCCTCGTCTGCCCCCTGCACAACCAAGAGGTGACAGCAGAGGATGGAACACAG
CGGTGTGAGAAGTGCAGCAAGCCCTGTGCCGAGTGTGCTATGGTCTGGGCATGGAGCACTTGCAGAG
GTGAGGGCAGTTACCAGTGCCAATATCCAGGAGTTTGTGGTGCAGAAGATCTTTGGGAGCCTGGCA
TTTCTGCCGAGAGCTTTGATGGGGACCCAGCTCCAACACTGCCCGCTCCAGCCAGAGCAGCTCCAA
GTGTTTGAGACTCTGGAAGAGATCACAGGTTACCTATACATCTCAGCATGGCCGGACAGCCTGCCTGAC
CTCAGCGTCTCCAGAACCTGCAAGTAATCCGGGGACGAATTCTGCACAATGGCGCTACTCGCTGACC
CTGCAAGGGCTGGGCATCAGCTGGCTGGGGCTGCGCTCACTGAGGGAAGTGGGCAGTGGACTGGCCCTC
ATCCACCATAACACCCACCTCTGCTTCTGTGCACACGGTGCCTGGGACCAGCTCTTTGGAACCCGCAC
CAAGCTCTGCTCCACACTGCCAACCCGGCCAGAGGACGAGTGTGTGGGCGAGGGCCTGGCCTGCCACCAG
CTGTGCGCCCGAGGGCACTGCTGGGGTCCAGGGCCACCCAGTGTGTCAACTGCAGCCAGTTCCTTCGG
GGCCAGGAGTGCCTGGAGGAATGCCGACTGTCAGGGGCTCCCAGGGAGTATGTGAATGCCAGGCAC
TGTTTGGCGTCCACCCTGAGTGTGAGCCCAAGTGGCTCAGTACCTGTTTGGACCGGAGGCTGAC
CAGTGTGTGGCCTGTGCCACTATAAGGACCCCTCCCTTCTGCGTGGCCCGCTGCCACGGGTGAAAA
CCTGACCTCTCTACATGCCATCTGGAAGTTTCCAGATGAGGAGGGCGCATGCCAGCCTTGCCCCATC
AACTGCACCCACTCG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
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Protein Sequence:

>Peptide sequence encoded by RG239056
 Blue=ORF Red=Cloning site Green=Tag(s)

```
MKLRLPASPETHLDMLRHL YQGCQVQGNLELTYLPTNASLSFLQDIQEVQGYVLI AHNQVRQVPLQRL
RIVRGTQLFEDNYALAVLDNGDPLNNTTPVTGASPGGLRELQLRSLTEILKGGVLIQRNPQLCYQDTIL
WKDIFHKNNQLALTLIDTNRSRACHPCSPMCKGSRWGESSEDCQSLTRTVACGGCARCKGPLPTDCCH
EQCAAGCTGPKHSDCLACLHFNHSGICELHCPALVTYNTDTFESMPNPEGRYTFGASCVTACPYNYLST
DVGSTLVCPLHNQEVTAEDGTQRCEKSKPCARVCYGLGMEHLREVAVTSANIQEFAGCKKIFGSLA
FLPESFDGDPASNTAPLQPEQLQVFETLEEITGYLYISAWPDSL PDL SVFQNLQVIRGRILHNGAYSLT
LQGLGISWLGLRSLRELGSGLALIHHTHLCFVHTVPWDQLFRNPHQALLHTANRPEDECVGEGLACHQ
LCARGHCWGPPTQCVNCSQFLRGQECVEECRVLQGLPREYVNRHCLPCHPECQPQNGSVTCFGPEAD
QCVACAHYKDPFVCVARCPSGVKPDLSYMPIWKFPDEEGACQPCPINCTHS
TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV
MGYGFYHFGTYPSTYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPE
SVIFTDKIIRSNATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSHMHFKSAIHPSILQNGGPMFA
FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV
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Restriction Sites:

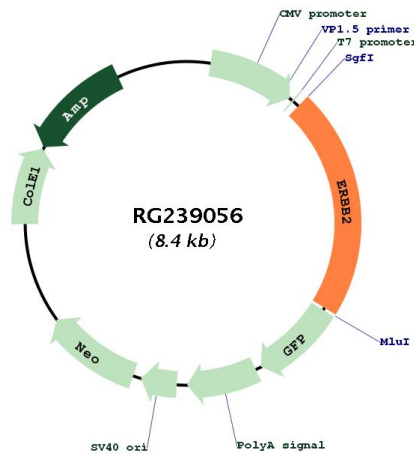
Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001289938
 ORF Size: 1809 bp

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|--------------------------|---|
| 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). |
| RefSeq: | NM_001289938.2 |
| RefSeq Size: | 2590 bp |
| RefSeq ORF: | 1812 bp |
| Locus ID: | 2064 |
| UniProt ID: | P04626 |
| Cytogenetics: | 17q12 |
| 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: | 66.5 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] |