

Product datasheet for **MR210207**

ErbB2 (BC046811) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ErbB2 (BC046811) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ErbB2
Synonyms:	Neu, HER-2, c-erbB2, HER2, c-neu, mKIAA3023
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide
Sequence:

>MR210207 representing BC046811
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGCTGGCGCCTGGTGCCGTTGGGGTTCCTCCTCGCCCTCCTGTCCCCGGAGCCGCGGGTACCC
AAGTGTGTACCGGTACCGACATGAAGTTGCGACTCCCTGCCAGTCTGAGACCCACCTGGACATGCTTCG
CCACCTCTACCAGGGCTGTCAGGTGGTGCAGGGCAATTTGGAGCTTACCTACCTGCCCGCAATGCCAGC
CTCTATTCTGCAGGACATCCAGGAAGTCCAGGGATACATGCTCATCGCTCACAAACCGAGTGAAACACG
TCCCCTGCGAGAGTTGCGCATCGTGAGAGGGACTCAGCTCTTTGAGGACAAGTATGCCCTGGTGTGCT
AGACAACCGAGACCCTTTGGACAACGTACCACCGCCGCCAGGCAGAACCCAGAAAGGGCTGCGGGAG
CTGCGAGCTTGAAGTCTCACAGAGATCTTGAAGGGAGGAGTTTGGATCCGTGGGAACCCCTCAGCTGTCT
ACCAGGACATGGTTTTGTGGAAGGATGTCTCCGTAAGAATAACCAGCTGGCTCCTGTGCGACATGGACAC
CAATCGTTCCCGGCCTGTCCACCTTGTCCCCAACCTGCAAAGACAATCACTGTTGGGGTGAGAGTCTCT
GAAGACTGTCAGATCTTGACTGGCACCATCTGACTAGTGGCTGTGCCCGGTGCAAGGGCCGGCTGCCCA
CTGACTGTTGCCATGAGCAGTGTGCTGCAGGCTGCACGGGTCCCAAGCATTCTGACTGCCTGGCCTGCCT
CCACTTCAATCATAGTGGTATCTGTGAGCTGCACTGCCCGGCCCTCATCACCTACAACACAGACACCTTC
GAGTCCATGCTCAACCTGAGGGTGCCTACACCTTTGGTGCCAGCTGTGTGACCACCTGCCCTACAACCT
ACCTCTCCACGGAAGTGGGATCCTGCACCTCTGGTCTGTCCCCGAACAACCAAGAGGTACAGCTGAGGA
CGGAACACAGCGGTGTGAGAAAATGCAGCAAGCCCTGTGCTGGAGTATGCTATGGTCTGGGCATGGAGCAC
CTCCGAGGGCGAGGGCCATCACCAGTGACAATATCCAGGAGTTTGTGGCTGCAAGAAGATCTTTGGGA
GCCTGGCATTTTTGGCGGAGAGCTTTGATGGGAACCCCTCCTCCGGCGTTGCCCACTGAAGCCAGAGCA
TCTCCAAGTGTTGAAACCCTGGAGGAGATCACAGGTTACCTATACATTTGAGCATGGCCAGAGAGCTTC
CAAGACCTCAGTGTCTTCCAGAACCCTCGGGTCAATTCGGGGACGGATTCTCCATGATGGTCTTACTCAT
TGACGTTGCAAGGCCTGGGGATTCACTCACTGGGGCTACGCTCACTGCGGGAGCTGGGCAGTGGATTGGC
TCTCATTACCGCAACACCCATCTCTGCTTTGTAACACTGTACCTTGGGACCAGCTCTTCCGGAACCCG
CACCAGGCCCTACTCCACAGTGGGAACCGGCCAGAAGAGGCATGTGGTCTTGGGGCTTGGTCTGTAAC
CACTGTGTGCCCGTGGGCACTGCTGGGGCCAGGGCCACCCAGTGTGCAACTGCAGTCACTTCTCCG
GGGCCAGGAGTGTGTGGAGGAGTCCGAGTATGGAAGGGGCTCCCAGGGAGTATGTGAGGGCAAGCAC
TGCTGCCATGCCACCCGAGTGTGAGCCTCAAAACAGCTCGGAGACCTGCTATGGATCGGAGGCTGACC
AGTGTGAGGCTTGTGCCACTACAAGGACTCATCTTCTGTGTGGCTCGCTGCCCAAGTGGTGTGAAGCC
AGACCTCTCTACATGCCTATCTGGAAGTACCCGGATGAGGAGGGCATATGTCAGCCATGCCCATCAAC
TGCACCCACTCATGTGTGGACCTGGACGAACGAGGCTGCCAGCAGAGCAGAGAGCCAGCCAGTGCAT
TCATCATTGCAACTGTGGTGGCGTCTGTTGTTCTGATCATAGTGGTGGTCAATGGAATCCTAATCAA
ACGAAGGCGACAGAAGATCCGGAAGTATACCATGCGTAGGCTGCTGCAGGAGACCGAGGTGAGGCGTGCC
GAGGGCCTCTAGCACCCCTTGGCTTTGCAGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR210207 representing BC046811
 Red=Cloning site Green=Tags(s)

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MELAAWCRWGFLALLSPGAAGTQVCTGTMKLRLPASPETHLDMRLHYQGCQVVGNNLELTYLPANAS
LSFLQDIQEVQGYMLIAHNRVKHVPLQRLRIVRGTOQLFEDKYALAVLDNRDPLDNVTTAAPGRTPPEGLRE
LQLRSLTEILKGGVLIIRGNPQLCYQDMVLWKDVLKNNQLAPVMDTNRSRACPPCAPTCKDNHCWGESP
EDCQILGTICTSGCARCKGRLPTDCCHEQCAAGCTGPKHSDCLACLHFNHSGICELHCPALITYNTDTF
ESMLNPEGRYTFGASCVTTCYPYNYLSTEVGSCTLVCPNNQEVTAEDGTQRCEKCSKPCAGVCYGLGMEH
LRGARAITSDNIQEFAGCKKIFGSLAFLPESFDGNPSSGVAPLKPEHLQVFETLEETITGYLYISAWPESF
QDLSVFQNLRVIRGRILHDGAYSLTLQGLGIHSLGLRSLRELGSGLALIHRNTHLCFVNTVPWDQLFRNP
HQALLHSGNRPEEACGLEGLVCNSLCARGHCWGPPTQCVCNSQFLRGQECVEECRVWVWGLPREYVRGKH
CLPCHPECPQNSSETCYGSEADQCEACAHYKDSSSCVARCPGKPDLSYMPIWKYPDEEGICQPCPIN
CTHSCVDLDERGCPAEQRASPVTFIIATVVGVLLFLIIVVIGILIKRRRQKIRKYTMRRLLQETEVVRA
EGLLAPPWLCS
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: BC046811

ORF Size: 2133 bp

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: [BC046811](#), [AAH46811](#)

RefSeq Size: 4694 bp

RefSeq ORF: 2135 bp

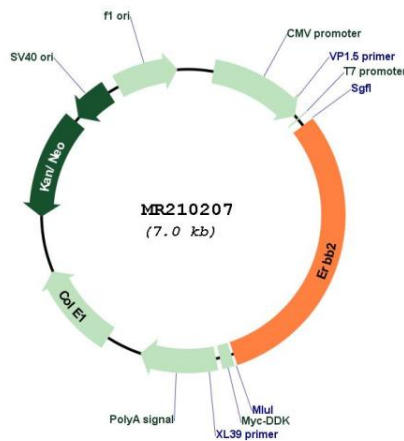
Locus ID: 13866

Cytogenetics: 11 D

MW: 172 kDa

Gene Summary: Protein tyrosine kinase that is part of several cell surface receptor complexes, but that apparently needs a coreceptor for ligand binding. Essential component of a neuregulin-receptor complex, although neuregulins do not interact with it alone. GP30 is a potential ligand for this receptor. Regulates outgrowth and stabilization of peripheral microtubules (MTs). Upon ERBB2 activation, the MEMO1-RHOA-DIAPH1 signaling pathway elicits the phosphorylation and thus the inhibition of GSK3B at cell membrane. This prevents the phosphorylation of APC and CLASP2, allowing its association with the cell membrane. In turn, membrane-bound APC allows the localization of MACF1 to the cell membrane, which is required for microtubule capture and stabilization (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR210207