

## Product datasheet for RC224398

### ErbB 3 (ERBB3) (NM\_001005915) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ErbB 3 (ERBB3) (NM_001005915) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ErbB 3
Synonyms:	c-erbB-3; c-erbB3; ErbB-3; erbB3-S; FERLK; HER3; LCCS2; MDA-BF-1; p45-sErbB3; p85-sErbB3; p180-ErbB3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC224398 representing NM_001005915 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGAGGGCGAACGACGCTCTGCAGGTGCTGGGCTTGCTTTTCAGCCTGGCCCGGGCTCCGAGGTGGCA  
ACTCTCAGGCAGTGTCTCTGGGACTCTGAATGGCCTGAGTGTGACCGCGATGCTGAGAACCAATACCA  
GACACTGTACAAGCTCTACGAGAGGTGTGAGGTGGTGTGGGGAACCTTGAGATTGTCTCACGGGACAC  
AATGCCGACCTCTCCTTCTGCAGTGGATTCGAGAAGTGACAGGCTATGTCCTCGTGCCATGAATGAAT  
TCTCTACTCTACCATTGCCAACCTCCGCGTGGTGGCAGGGACCCAGGTCTACGATGGGAAGTTGCCAT  
CTTCGTCATGTTGAATAACACCAACTCCAGCCAGCTCTGCGCCAGCTCCGCTTACTCAGCTCACC  
GGTCAGTTCGCGATGGTTCCTTCTGGCCTCACCCCTCAGCAAGCCCAAGACTGGTACCTCCTTGATGATG  
ACCAAGACTGCTCACTCTAAGTGCCTCTCCAAGGTGCCTGTCACCTTGCCGCTGTC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:	>RC224398 representing NM_001005915 Red=Cloning site Green=Tags(s)
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MRANDALQVLGLLFLSLARGSEVGNLSQAVCPGTLNGLSVTGAENQYQTLYKLYERCEVVMGNLEIVLTGH  
NADLSFLQWIREVTGYVLVAMNEFSTLPLPNLRVVRGTQVYDGKFAIFVMLNYNTNSSHALRQLRLTQLT  
GQFPMVPSGLTPQQAQDWYLLDDDPRLTLSSASKVPVTLAAV

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV



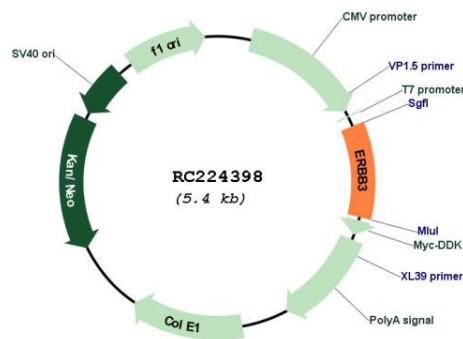
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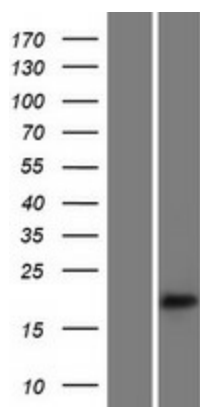
**RefSeq ORF:** 552 bp  
**Locus ID:** 2065  
**UniProt ID:** [P21860](#)  
**Cytogenetics:** 12q13.2  
**Protein Families:** Adult stem cells, Druggable Genome, Protein Kinase, Secreted Protein, Stem cell - Pluripotency, Transmembrane  
**Protein Pathways:** Calcium signaling pathway, Endocytosis, ErbB signaling pathway  
**MW:** 20.17 kDa

**Gene Summary:** This gene encodes a member of the epidermal growth factor receptor (EGFR) family of receptor tyrosine kinases. This membrane-bound protein has a neuregulin binding domain but not an active kinase domain. It therefore can bind this ligand but not convey the signal into the cell through protein phosphorylation. However, it does form heterodimers with other EGF receptor family members which do have kinase activity. Heterodimerization leads to the activation of pathways which lead to cell proliferation or differentiation. Amplification of this gene and/or overexpression of its protein have been reported in numerous cancers, including prostate, bladder, and breast tumors. Alternate transcriptional splice variants encoding different isoforms have been characterized. One isoform lacks the intermembrane region and is secreted outside the cell. This form acts to modulate the activity of the membrane-bound form. Additional splice variants have also been reported, but they have not been thoroughly characterized. [provided by RefSeq, Jul 2008]

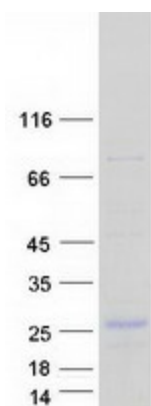
### Product images:



Circular map for RC224398



Western blot validation of overexpression lysate (Cat# [LY423671]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224398 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ERBB3 protein (Cat# [TP324398]). The protein was produced from HEK293T cells transfected with ERBB3 cDNA clone (Cat# RC224398) using MegaTran 2.0 (Cat# [TT210002]).