

## Product datasheet for **SC118918**

### ErbB 3 (ERBB3) (NM\_001982) Human Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ErbB 3 (ERBB3) (NM_001982) Human Untagged Clone
Tag:	Tag Free
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:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF sequence for NM_001982 edited

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ATGAGGGCGAACGACGCTCTGCAGGTGCTGGGCTTGTCTTTTCAGCCTGGCCCGGGGCTCC
GAGGTGGGCAACTCTCAGGCAGTGTGTCTGGGACTCTGAATGGCCTGAGTGTGACCGGC
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CGAGAAGTGACAGGCTATGTCTCGTGGCCATGAATGAATTCTCTACTCTACCATTGCC
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GACCCACTGTGCTCCTCTGGGGGATGCTGGGGCCAGGCCCTGGTCAGTGCTTGTCTGT  
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CGAGAATTTGCCCATGAGGCCGAATGCTTCTCCTGCCACCCGGAATGCCAACCCATGGAG  
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AGAACGTAA

**5' Read Nucleotide Sequence:**

>OriGene 5' read for NM\_001982 unedited  
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 CAGCAGCCACCAATTCGCCAGCGGTTACAGGTGGCTCTTGCCCTCGATGTCTAGCCTAGGG  
 GCCCCGGGCGGACTTGGCTGGGCTCCCTTACCCTCTGCGGAGTCATGAGGGCGAACG  
 ACGCTCTGCAGGTGCTGGGCTTGTCTTTTACGCTGGCCCCGGGCTCCGAGGTGGCAACT  
 CTCAGGCAGTGTGCTCTGGGACTCTGAATGGCCTGAGTGTGACCGGCGATGCTGAGAACC  
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 TTGTGCTCACGGACACAATGCCGACCTCTCTTCTGACAGTGGATTGAGAAAGTGACAG  
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 TGCGAGGGACCCAGGCTACGATGGGAAGTTTGGCATCTTCGTCATGTTGAACTATAACA  
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 CCTGTCATGAGGTTTGAAGGGCGATGCTGGGGTCTGGATCAGAAGACTGCCAGACAT  
 TGACCAAGACCATCTGTCTCTCAGTGAATGGTCACTGCTTTGGGCCAACCCACC  
 AGTGCTGCCATGATGAGTGTGCCGGGGCTGCNTCAGCCCTCAGACACAGACTGCTTTG  
 CCTGCCG

**3' Read Nucleotide Sequence:**

>OriGene 3' read for NM\_001982 unedited  
 TGTACGCGGCCGCAATCTAGNATCGAGNNCTTTTTTTTTTTTTTTTTTTTTTTTTTAA  
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 TTCTGCCTCAGCTCCCAAAGTCTGAGATTACAGGCATGAGCCACCATGCCGACTTCC  
 CTTTGGGTAATAATGAGATAATATGTATGTCACAGAATTGTTTTAAGGATGATAAAGGACT  
 AAGGGAGATAATGTAGGTGAAGTTTAGTATGATGCCTGGCTCATAGTTAAGGGCTGAATC  
 TTGATAGTAATCAATATCTACTCTAACCTCTTCTTACAGATTTTAAGCTTCTGTCTT  
 TCTAGGGGGTTAAGAGTCATAAACCAAAATTACACTTTCCTCTGCTAGGTTTCTCCCTT  
 TCCTCTTCTTGACAGTCTGATGGGAAACAAAGGCACACATAAGAGCCTATTTCCAAGTAC  
 CAAAAATCCTGACAGGAAGGGATATGGAGAGTAACCCCTTCTTATCTCCAGGAGTGCCTGT  
 GAATATTCTGAGGAATGGGACCGGGAAAGCCCCAAATAAGGATAACCTTCTCTGGGGTC  
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 AAAAGGGAAATCCGGTAAAAAATGGTTCCCATAGAGCGCCTCACCCGACCAAAAGCCCT  
 GGGATTGCAAAAGTATCACGCCTCACTCCTCGCGCCTTCTGCTCTCGTGAACCTCTCTCC  
 CCCCCCTTATGGTCTCTTACGATATGCTGGTAATCCGCTTCTCGTGCCTACGTACCTA  
 TACACCACTCTTAGAGTGTGTTTACTATCACATTTGCCCCCTCCATTAGTTTGTCTCT  
 TTTTACCACCTCTCACTCCCCAC

**Restriction Sites:**

NotI-NotI

**ACCN:**

NM\_001982

**Insert Size:**

4029 bp

**OTI Disclaimer:**

Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:**

This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_001982.2</a> , <a href="#">NP_001973.2</a>
<b>RefSeq Size:</b>	5765 bp
<b>RefSeq ORF:</b>	4029 bp
<b>Locus ID:</b>	2065
<b>UniProt ID:</b>	<a href="#">P21860</a>
<b>Cytogenetics:</b>	12q13.2
<b>Domains:</b>	Recep_L_domain, pkinase, TyrKc, S_TKc, Furin-like, FU
<b>Protein Families:</b>	Adult stem cells, Druggable Genome, Protein Kinase, Secreted Protein, Stem cell - Pluripotency, Transmembrane
<b>Protein Pathways:</b>	Calcium signaling pathway, Endocytosis, ErbB signaling pathway
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).</p>