

Product datasheet for **SC311428**

ErbB 4 (ERBB4) (NM_001042599) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: ErbB 4 (ERBB4) (NM_001042599) Human Untagged Clone
Tag: Tag Free
Symbol: ErbB 4
Synonyms: ALS19; HER4; p180erbB4
Mammalian Cell Selection: None
Vector: pCMV6-XL4
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_001042599 edited
 TCAGCACGGGATCTGAGACTTCCAAAAATGAAGCCGGCGACAGGACTTTGGGTCTGGGT
 GAGCCTTCTCGTGGCGGGGACCGTCCAGCCAGCGATTCTCAGTCAGTGTGTGCAGG
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AAACAGGATAATTTCAATAATATTATTCAAACATAAACTGGTCTAGGAGAATATTGCATC
ACTGACTAATTAGCCTATCTAGA
    
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Restriction Sites:

Please inquire

ACCN:

NM_001042599

Insert Size:

6200 bp

OTI Disclaimer:

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.

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:

The ORF of this clone has been fully sequenced and found to be a perfect match to NM_001042599.1.

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: [NM_001042599.1](#), [NP_001036064.1](#)

RefSeq Size: 11893 bp

RefSeq ORF: 3879 bp

Locus ID: 2066

UniProt ID: [Q15303](#)

Cytogenetics: 2q34

Protein Families: Druggable Genome, Protein Kinase, Transmembrane

Protein Pathways: Calcium signaling pathway, Endocytosis, ErbB signaling pathway

Gene Summary: This gene is a member of the Tyr protein kinase family and the epidermal growth factor receptor subfamily. It encodes a single-pass type I membrane protein with multiple cysteine rich domains, a transmembrane domain, a tyrosine kinase domain, a phosphatidylinositol-3 kinase binding site and a PDZ domain binding motif. The protein binds to and is activated by neuregulins and other factors and induces a variety of cellular responses including mitogenesis and differentiation. Multiple proteolytic events allow for the release of a cytoplasmic fragment and an extracellular fragment. Mutations in this gene have been associated with cancer. Alternatively spliced variants which encode different protein isoforms have been described; however, not all variants have been fully characterized. [provided by RefSeq, Jul 2008]

Transcript Variant: This variant (JM-a/CYT-2) lacks an alternate in-frame exon, compared to variant JM-a/CYT-1, resulting in a shorter protein (isoform JM-a/CYT-2) that lacks the phosphatidylinositol-3 kinase binding site, compared to isoform JM-a/CYT-1.