

## Product datasheet for **RG212834**

### CXXC4 (NM\_025212) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** CXXC4 (NM\_025212) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** CXXC4  
**Synonyms:** IDAX  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG212834 representing NM\_025212  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGCACCACCGAAACGACTCCCAGAGGCTGGGAAAGCTGGTGCCCGCCAGAGCCGTCGTTGCAAATGG  
 CAAATACTAATTTCTCTCCACCTTATCCCTGAACACTGCAGACCTTTGGCGGGGAATGCATGAACAA  
 GCTCAAATGCGGCGTCTGAAGCAGAGATAATGAATCTCCCGAGCGCTGGGGACTTTTTCCGCTATC  
 CCGGCTTAGGGGCATCTCATTACCTCCAGGGTTCATCGTCATGACAGCCCTTCACTCCCCGCAGCAG  
 CCTCAGCAGCCGTCACAGACAGTGGTTCAAATTGCCAATCTGGCAGACTGCCCGAGAATCATTCTC  
 CTCTCTCGTCTCTCAGGGGAGCTGGCGGAGCCAACCCAGCCAAGAAGAAGAGGAAAAGGTGTGGG  
 GTCTGCGTGCCCTGCAAGAGGCTCATCAACTGTGGCGTCTGCAGCAGTTGCAGGAACCGAAAACGGGAC  
 ACCAGATCTGCAAATTTAGAAAATGTGAAGAGCTAAAGAAAAAACCTGGCACTTCACTAGAGAGAACACC  
 TGTTCCAGCGCTGAAGCATTCCGATGGTTCTTT

**ACGCGTACGCGGCCGCTCGAG** - GFP Tag - GTTTAA

**Protein Sequence:** >RG212834 representing NM\_025212  
 Red=Cloning site Green=Tags(s)

MHHRNDSQRLGKAGCPPEPSLQMANTNFLSTLSPEHCRPLAGECMNKLKCGAAEAEIMNLPERVGTFSAI  
 PALGGISLPPGVIVMTALHSPAASAASAVTDSAFQIANLADCPQNHSSSSSSSSGGAGGANPAKKRKRCCG  
 VCVPCRLLINCGVCCSRNRKTGHQICKFRKCEELKKKPGTSLERTPVPSAEAFRWF

**TRTRPLE** - GFP Tag - V

**Restriction Sites:** Sgfl-MluI



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**Cloning Scheme:**


**ACCN:** NM\_025212

**ORF Size:** 594 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:** [NM\\_025212.1](#), [NP\\_079488.1](#)

**RefSeq Size:** 761 bp

**RefSeq ORF:** 1104 bp

**Locus ID:** 80319

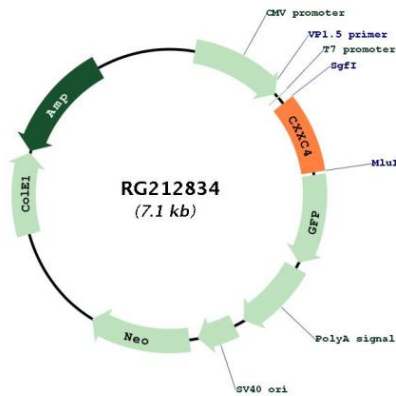
**Cytogenetics:** 4q24

**Protein Families:** Druggable Genome

**Protein Pathways:** Wnt signaling pathway

**Gene Summary:** This gene encodes a CXXC-type zinc finger domain-containing protein that functions as an antagonist of the canonical wingless/integrated signaling pathway. The encoded protein negatively regulates wingless/integrated signaling through interaction with the post synaptic density protein/ Drosophila disc large tumor suppressor/ zonula occludens-1 protein domain of Dishevelled, a scaffolding protein required for the stabilization of the transcriptional co-activator beta-catenin. In addition, the CXXC domain of this protein has been shown to bind unmethylated CpG dinucleotides, localize to promoters and CpG islands, and interact with the catalytic domain of methylcytosine dioxygenase ten-eleven-translocation 2, an iron and alpha-ketoglutarate-dependent dioxygenase that modifies the methylation status of DNA. In humans, a mutation in this gene has been associated with development of malignant renal cell carcinoma. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Sep 2015]

**Product images:**



Circular map for RG212834