

Product datasheet for RC212834

CXXC4 (NM_025212) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids
 Product Name: CXXC4 (NM_025212) Human Tagged ORF Clone
 Tag: Myc-DDK
 Symbol: CXXC4
 Synonyms: IDAX
 Mammalian Cell Selection: Neomycin
 Vector: pCMV6-Entry (PS100001)
 E. coli Selection: Kanamycin (25 ug/mL)
 ORF Nucleotide Sequence: >RC212834 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGCACCACCGAAACGACTCCCAGAGGCTGGGAAAGCTGGTGCCCGCCAGAGCCGTCGTTGCAAATGG
 CAAATACTAATTTCTCTCCACCTTATCCCCTGAACACTGCAGACCTTTGGCGGGGAATGCATGAACAA
 GCTCAAATGCGGCGTCTGAAGCAGAGATAATGAATCTCCCGAGCGCTGGGGACTTTTTCCGCTATC
 CCGGCTTAGGGGCATCTCATTACCTCCAGGGTTCATCGTCATGACAGCCCTTCACTCCCCCGCAGCAG
 CCTCAGCAGCCGTCACAGACAGTGCCTTCAAATTGCCAATCTGGCAGACTGCCCGAGAATCATTCTC
 CTCTCTCGTCTCTCAGGGGAGCTGGCGGAGCCAACCCAGCAAGAAGAAGAGGAAAAGGTGTGGG
 GTCTGCGTGCCCTGCAAGAGGCTCATCAACTGTGGCGTCTGCAGCAGTTGCAGGAACCGCAAACGGGAC
 ACCAGATCTGCAAATTTAGAAAATGTGAAGAGCTAAAGAAAAAACCTGGCACTTCACTAGAGAGAACC
 TGTTCCAGCGCTGAAGCATTCCGATGGTTCTTT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC212834 protein sequence
 Red=Cloning site Green=Tags(s)

MHHRNDSQRLGKAGCPPEPSLQMANTNFLSTLSPEHCRPLAGECMNKLKCGAAEAEIMNLPERVGTFSAI
 PALGGISLPPGVIVMTALHSPAASA AVTDSAFQIANLADCPQNHSSSSSSSSGGAGGANPAKKRKRKCG
 VCVPCRRLINCGVSSCRNRKTGHQICKFRKCEELKKKPGTSLERTPVPSAEAFRFFF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV



Chromatograms: https://cdn.origene.com/chromatograms/mk6442_e06.zip

Restriction Sites: SgfI-MluI

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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

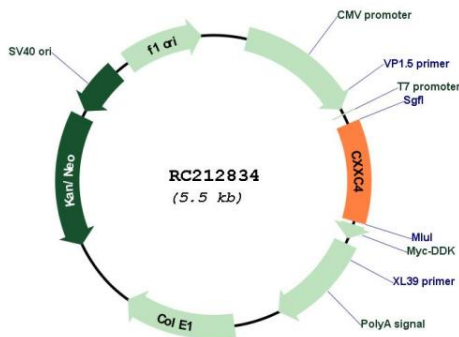
RefSeq: [NM_025212.1](#), [NP_079488.1](#)

RefSeq Size: 5578 bp

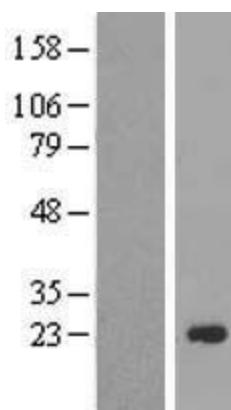
RefSeq ORF: 1104 bp
Locus ID: 80319
Cytogenetics: 4q24
Protein Families: Druggable Genome
Protein Pathways: Wnt signaling pathway
MW: 21 kDa

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 RC212834



Western blot validation of overexpression lysate (Cat# [LY410836]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212834 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).