

Product datasheet for **RC206423**

CYP4F12 (NM_023944) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP4F12 (NM_023944) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYP4F12
Synonyms:	CYPIVF12; F22329_1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC206423 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGTCGCTGCTGAGCCTGCCCTGGCTGGGCCTCAGACCGGTGGCAATGTCCCATGGCTACTCTGTCTGC
 TGGTTGTGGGCTCCTGGCTACTCGCCGCATCCTGGCTTGGACCTATGCCTTCTATAACAACTGCCGCCG
 GCTCCAGTGTTCACACAGCCCCAAAACGGAAGTGGTTTTGGGGTACCTGGGCCTGATCACTCTTACA
 GAGGAGGGCTTGAAGGACTCGACCCAGATGTGGCCACCTATCCAGGGCTTTACGGTATGGTGGGTC
 CCATCATCCCCTTCATCGTTTTATGCCACCCTGACACCATCCGGTCTATCACCAATGCCTCAGCTGCCAT
 TGCACCCAAGGATAATCTCTTCATCAGTTCTGAAGCCCTGGCTGGGAGAAGGGATACTGCTGAGTGGC
 GGTGACAAAGTGGAGCCGCCACCGTCGGATGCTGACGCCCGCTTCCATTTCAACATCCTGAAGTCTATA
 TAACGATCTTCAACAAGAGTGCAACATCATGCTTGACAAGTGGCAGCACCTGGCCTCAGAGGGCAGCAG
 TTGTCTGGACATGTTTGAGCACATCAGCCTCATGACCTTGGACAGTCTACAGAAATGCATCTTCAGCTTT
 GACAGCCATTGTGAGGAGAGGCCAGTGAATATATTGCCACCATCTGGAGCTCAGTGCCCTTGTAGAGA
 AAAGAAGCCAGCATATCCTCCAGCACATGGACTTCTGTATTACCTCTCCATGACGGGGCGGCTTCCA
 CAGGGCTGCCGCTGGTGCATGACTTCACAGACGCTGTATCCGGGAGCGGCTCGCACCTCCCCACT
 CAGGGTATTGATGATTTTTTCAAAGACAAAGCCAAGTCCAAGACTTTGGATTTTATTGATGCTTCTGC
 TGAGCAAGGATGAAGATGGGAAGCATTGTGATGAGGATATAAGAGCAGAGGCTGACACCTTCATGTT
 TGGAGGCCATGACACCACGGCAGTGGCCTCTCCTGGTCTGTACAACCTTGGAGGCCACCCAGAATAC
 CAGGAGCGCTGCCAGAGGAGTGAAGAGCTTCTGAAGGACCGCATCTAAAGAGATTGAATGGGACG
 ACCTGGCCAGCTGCCCTTCTGACCATGTGCGTGAAGGAGAGCTGAGGTTACATCCCCAGCTCCCTT
 CATCTCCCGATGCTGCACCCAGGACATTGTTCTCCAGATGGCCGAGTCATCCCCAAAGGCATTACCTGC
 CTCATCGATATTATAGGGTCCATCACAAACCACTGTGTGGCCGATCCTGAGGTCTACGACCCCTTCC
 GCTTTGACCCAGAGAACAGCAAGGGGAGGTACCTCTGGCTTTTATTCTTTTTCCGAGGGCCAGGAA
 CTGCATCGGGCAGGCTTCGCCATGGCGGAGATGAAAGTGGTCTGGCGTTGATGCTGCTGCACTTCCGG
 TTCCTGCCAGACCACACTGAGCCCCGAGGAAGCTGGAATTGATCATGCGCGCCGAGGGCGGCTTTGGC
 TGCGGGTGGAGCCCTGAATGTAAGCTTGCA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC206423 protein sequence
 Red=Cloning site Green=Tags(s)

MSLLSLPWLGLRPVAMSPWLLLLLVVGSWLLARILAWTYAFYNNCRRLQCFPQPPKRNFWGHLGLITPT
 EEGLKDSTQMSATYSQGFVWLGPIIPFIVLCHPDTIRSITNASAAIAPKDNLFIRFLKPWLGEIILLSG
 GDKWSRHRMLTPAFHFNILKSYITIFNKSANIMLDKWQHLASEGSSCLDMFEHISLMTLDSLQKCIFSF
 DSHCQERPSEYIATILELSALVEKRSQHILQHMDFLYYLSDGRRFHRACRLVHDFDVAIRERRRLLPT
 QGIDDFKDKAKSKTLDLIDVLLL SKDEDGKALSDEDIRAEADTFMFGGHDTTASGLSWVLYNLRHPEY
 QERCQEVQELLKDRDPKEIEWDDLAQLPFLTMCVKESLRLHPPAPFISRCCTQDIVLPDGRVIPKGITC
 LIDIIGVHHNPTVWPDPEVYDPFRFDPENSKGRSPLAFIPFSAGPRNCIGQAFAMAEMKVVLLMLLHFR
 FLPDHTEPRRKLELIMRAEGLWLRVEPLNVSLQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6017_d11.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

ACCN: NM_023944

ORF Size: 1572 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: 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).

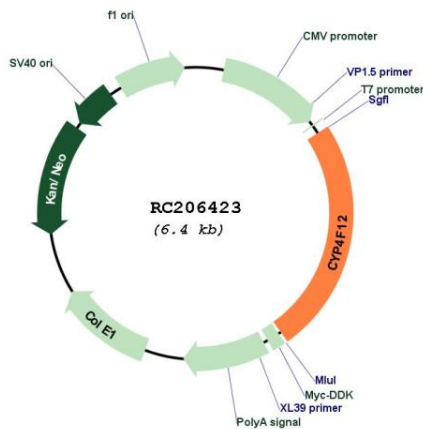
- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the 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_023944.4](#)

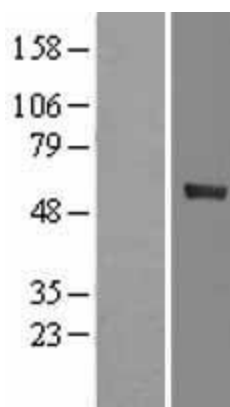
RefSeq Size: 1783 bp
RefSeq ORF: 1575 bp
Locus ID: 66002
UniProt ID: [Q9HCS2](#)
Cytogenetics: 19p13.12
Protein Families: Druggable Genome, P450, Transmembrane
MW: 60.3 kDa

Gene Summary: This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein likely localizes to the endoplasmic reticulum. When expressed in yeast the enzyme is capable of oxidizing arachidonic acid. It can also catalyze the epoxidation of 22:6n-3 and 22:5n-3 polyunsaturated long-chain fatty acids. This gene is part of a cluster of cytochrome P450 genes on chromosome 19. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]

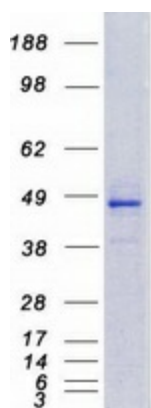
Product images:



Circular map for RC206423



Western blot validation of overexpression lysate (Cat# [LY402967]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC206423 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYP4F12 protein (Cat# [TP306423]). The protein was produced from HEK293T cells transfected with CYP4F12 cDNA clone (Cat# RC206423) using MegaTran 2.0 (Cat# [TT210002]).