OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for RC210185

CYP4F22 (NM_173483) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP4F22 (NM_173483) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYP4F22
Synonyms:	ARCI5; INLNE; LI3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC210185 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCTGCCCATCACAGACCGCCTGCTGCACCTCCTGGGGCTGGAGAAGACGGCGTTCCGCATATACGCGG
TGTCCACCCTTCTCCTCTTCCTGCTCTTCTTCCTGTTCCGCCTGCTGCTGCGGTTCCTGAGGCTCTGCAG
GAGCTTCTACATCACCTGCCGCCGGCTGCGCTGCTTCCCCCAGCCTCCCCGGCGCAACTGGCTGCTGGGC
CACCTGGGCATGTACCTTCCAAATGAGGCGGGCCTTCAAGATGAGAAGAAGGTACTGGACAACATGCACC
ATGTACTCTTGGTATGGATGGGACCTGTCCTGCCGCTGTTGGTTCTGGTGCACCCTGATTACATCAAACC
CCTTTTGGGAGCCTCAGCTGCCATCGCCCCCAAGGATGACCTCTTCTATGGCTTCCTAAAACCTTGGCTA
GGGGATGGGCTGCTGCTCAGCAAAGGTGACAAGTGGAGCCGGCACCGTCGCCTGCTGACACCCGCCTTCC
ACTTTGACATCCTGAAGCCTTACATGAAGATCTTCAACCAGAGCGCTGACATTATGCATGCTAAATGGCG
GCATCTGGCAGAGGGCTCAGCGGTCTCCCTTGATATGTTTGAGCATATCAGCCTCATGACCCTGGACAGT
CTTCAGAAATGTGTCTTCAGCTACAACAGCAACTGCCAAGAGAAGATGAGTGATTATATCTCCGCTATCA
TTGAACTGAGCGCTCTGTCTGTCCGGCGCCAGTATCGCTTGCACCACTACCTCGACTTCATTTACTACCG
CTCGGCGGATGGGCGGAGGTTCCGGCAGGCCTGTGACATGGTGCACCACTTCACCACTGAAGTCATCCAG
GAACGGCGGCGGGCACTGCGTCAGCAGGGGGCCGAGGCCTGGCTTAAGGCCAAGCAGGGGAAGACCTTGG
ACTTTATTGATGTGCTGCTCCTGGCCAGGGATGAAGATGGAAAGGAACTGTCAGACGAGGATATCCGAGC
CGAAGCAGACACCTTCATGTTTGAGGGTCACGACACAACATCCAGTGGGATCTCTTGGATGCTGTTCAAT
TTGGCAAAGTATCCGGAATACCAGGAGAAATGCCGAGAAGAGATTCAGGAAGTCATGAAAGGCCGGGAGC
TGGAGGAGCTGGAGTGGGACGATCTGACTCAGCTGCCCTTTACAACTATGTGCATTAAGGAGAGCCTGCG
CCAGTACCCACCTGTCACTCTTGTCTCTCGCCAATGCACGGAGGACATCAAGCTCCCAGATGGGCGCATC
ATCCCCAAAGGAATCATCTGCTTGGTCAGCATCTATGGAACCCACCACAACCCCACAGTGTGGCCTGACT
CCAAGGTGTACAACCCCTACCGCTTTGACCCGGACAACCCACAGCAGCGCTCTCCACTGGCCTATGTGCC
CTTCTCTGCAGGACCCAGGAATTGCATCGGACAGAGCTTCGCCATGGCCGAGTTGCGCGTGGTTGTGGCA
CTAACACTGCTACGTTTCCGCCTGAGCGTGGACCGAACGCGCAAGGTGCGGCGGAAGCCGGAGCTCATAC
TGCGCACGGAGAACGGGCTCTGGCTCAAGGTGGAGCCGCTGCCTCCGCGGGCC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC210185 protein sequence
Red=Cloning site Green=Tags(s)

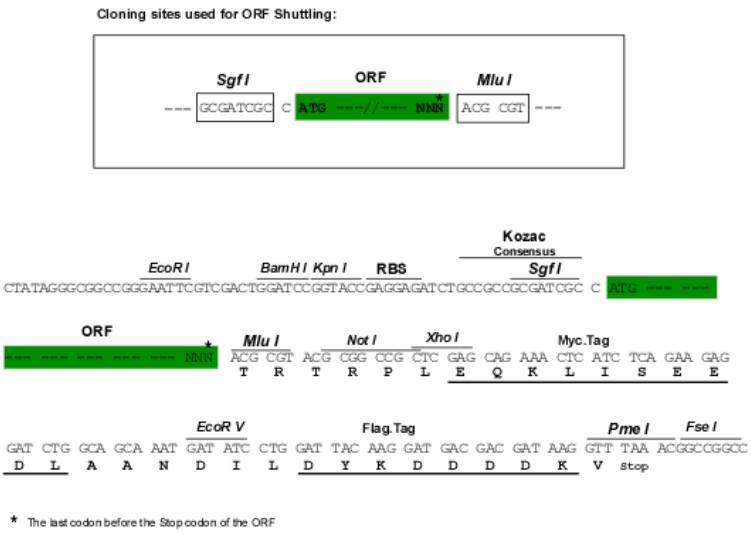
MLPITDRLLHLLGLEKTAFRIYAVSTLLLFLLFFLFRLLLRFLRLCRSFYITCRRLRCFPQPPRRNWLLG
HLGMYLPNEAGLQDEKKVLDNMHHVLLVWMGPVLPLLVLVHPDYIKPLLGASAAIAPKDDLFYGFLKPWL
GDGLLLSKGDKWSRHRRLLTPAFHFDILKPYMKIFNQSADIMHAKWRHLAEGSAVSLDMFEHISLMTLDS
LQKCVFSYNSNCQEKMSDYISAIIELSALSVRRQYRLHHYLDFIYYRSADGRRFRQACDMVHHFTTEVIQ
ERRRALRQQGAEAWLKAKQGKTLDFIDVLLLARDEDGKELSDEDIRAEADTFMFEGHDTTSSGISWMLFN
LAKYPEYQEKCREEIQEVMKGRELEELEWDDLTQLPFTTMCIKESLRQYPPVTLVSRQCTEDIKLPDGRI
IPKGIICLVSIYGTHHNPTVWPDSKVYNPYRFDPDNPQQRSPLAYVPFSAGPRNCIGQSFAMAELRVVVA
LTLLRFRLSVDRTRKVRRKPELILRTENGLWLKVEPLPPRA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6271_h11.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_173483

ORF Size: 1593 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_173483.4

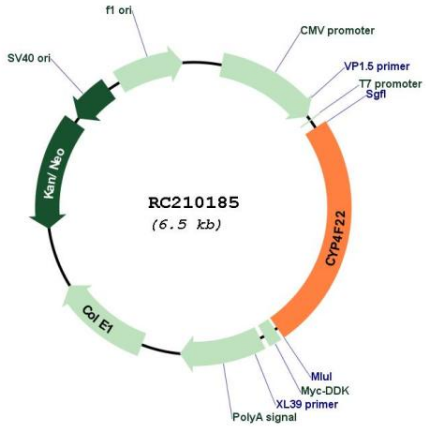
RefSeq Size: 2620 bp

RefSeq ORF: 1596 bp

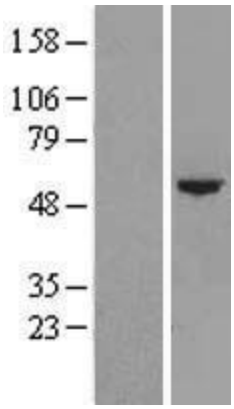
Locus ID: 126410

UniProt ID:	Q6NT55
Cytogenetics:	19p13.12
Domains:	p450
Protein Families:	Druggable Genome, Transmembrane
MW:	62 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 gene is part of a cluster of cytochrome P450 genes on chromosome 19 and encodes an enzyme thought to play a role in the 12(R)-lipoxygenase pathway. Mutations in this gene are the cause of ichthyosis lamellar type 3. [provided by RefSeq, Jul 2008]

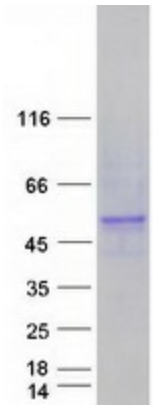
Product images:



Circular map for RC210185



Western blot validation of overexpression lysate (Cat# [LY406600]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC210185 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYP4F22 protein (Cat# [TP310185]). The protein was produced from HEK293T cells transfected with CYP4F22 cDNA clone (Cat# RC210185) using MegaTran 2.0 (Cat# [TT210002]).