

Product datasheet for RC211728

CYP11A1 (NM_001099773) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP11A1 (NM_001099773) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYP11A1
Synonyms:	CYP11A; CYPXIA1; P450SCC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC211728 representing NM_001099773 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGGCTCCAGAGGCCACCAAGAAGCTTTTGGCCCTGTTGGATGCAGTGTCTCGGGACTTCGTCAGTGTCC
TGCACAGGCGCATCAAGAAGCGGGCTCCGAAATTAAGCGGGGACATCAGTGTACCTGTTCCGCTT
TGCCTTTGAGTCCATCACTAACGTCATTTTGGGAGCGCCAGGGGATGCTGGAGGAAGTAGTGAACCC
GAGGCCAGCGATTCTGATGCCATCTACCAGATGTTCCACACCAGCGTCCCATGCTCAACCTCCCC
CAGACCTGTTCCGTCTGTTCCAGACCAAGACCTGGAAGGACCATGTGGCTGCATGGGACGTGATTTTCAG
TAAAGCTGACATATACCCAGAAGCTTCTACTGGGAATTGAGACAGAAAGGAAGTGTTCACCACGATTAC
CGTGGCATCCTCTACAGACTCCTGGGAGACAGCAAGATGTCTTCGAGGACATCAAGGCCAACGTACAG
AGATGCTGGCAGGAGGGTGGACACGACGTCCATGACCCTGCAGTGGCACTTGTATGAGATGGCAGCAA
CCTGAAGGTGCAGGATATGCTGCGGGCAGAGGTCTTGGCTGCGCGGCACCCAGGCCAGGGAGACATGGCC
ACGATGCTACAGCTGGTCCCCCTCCTCAAAGCCAGCATCAAGGAGACACTAAGACTTCACCCCATCTCCG
TGACCTGCAGAGATATCTTGTAAATGACTTGGTCTTCGAGATTACATGATTCTGCCAAGACACTGGT
GCAAGTGGCCATCTATGCTCTGGGCCGAGAGCCACCTTCTTCTCGACCCGAAAATTTTGACCAACC
CGATGGCTGAGCAAAGACAAGAACATCACCTACTCCGGAATTTGGCTTTGGCTGGGAGTGGCGCAGT
GTCTGGGACGGCGGATCGCTGAGCTAGAGATGACCATCTTCTCATCAATATGCTGGAGAAGCTTACAGAT
TGAAATCCAACACCTCAGCGATGTGGGCACCACATTCAACCTCATTCTGATGCCTGAAAAGCCCATCTCC
TTCACCTTCTGGCCCTTAAACCAGGAAGCAACCCAGCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC211728 representing NM_001099773
 Red=Cloning site Green=Tags(s)

MAPEATKNFLPLLDVSRDFVSVLHRRIKKAGSGNYSGDISDDLFRFAFESITNVIFGERQGMLEEVVNP
 EAQRFIDAIYQMFHTSVPMLNLPDLFRLFRTKTWKDHVAAWDVIFSKADIYTQNFYWELRQKGSVHHDY
 RGILYRLLGDSKMSFEDIKANVTEMLAGGVDTTSMTLQWHL YEMARNLKVQDMLRAEVL AARHQ AQGDMA
 TMLQLVPLLKASIKETLRLHPISVTLQRYLVNDLVLRDYMIPAKTLVQVAIYALGREPTFFDPENFDPT
 RWLSKDKNITYFRNLGFGWVVRQCLGRRIAELEMTIFLINMLENFRVEIQHLSDVGTTFNLI LMPKPI S
 FTFWPFNQEATQQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/ja2349_g04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



* The last codon before the Stop codon of the ORF

ACCN: NM_001099773

ORF Size: 1089 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_001099773.2](#)

RefSeq Size: 2010 bp

RefSeq ORF: 1092 bp

Locus ID: 1583

UniProt ID: [P05108](#)

Cytogenetics: 15q24.1

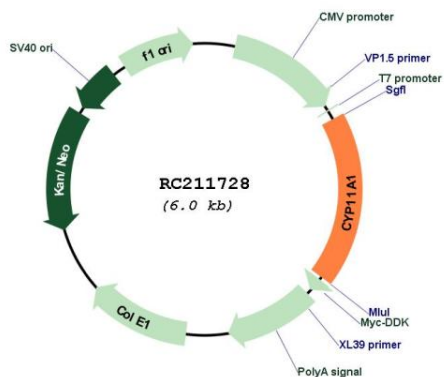
Protein Families: Druggable Genome, P450

Protein Pathways: C21-Steroid hormone metabolism, Metabolic pathways

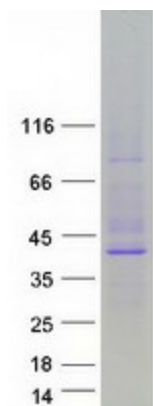
MW: 42.6 kDa

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 localizes to the mitochondrial inner membrane and catalyzes the conversion of cholesterol to pregnenolone, the first and rate-limiting step in the synthesis of the steroid hormones. Two transcript variants encoding different isoforms have been found for this gene. The cellular location of the smaller isoform is unclear since it lacks the mitochondrial-targeting transit peptide. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC211728



Coomassie blue staining of purified CYP11A1 protein (Cat# [TP311728]). The protein was produced from HEK293T cells transfected with CYP11A1 cDNA clone (Cat# RC211728) using MegaTran 2.0 (Cat# [TT210002]).