

Product datasheet for **RC213223**

CYP4Z1 (NM_178134) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CYP4Z1 (NM_178134) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CYP4Z1
Synonyms:	CYP4A20
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC213223 representing NM_178134
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGAGCCCTCCTGGCTTCAGGAACTCATGGCTCACCCCTTCTTGCTGCTGATCCTCCTCTGCATGTCTC
 TGCTGCTGTTTACAGTAATCAGGTTGTACCAGAGGAGGATGGATGATCAGAGCCCTGCACCTGTTTCC
 TGCACCCCTGCCACTGGTTCTATGGCCACAAGGAGTTTTACCCAGTAAAGGAGTTTGAGTGTATCAT
 AAGCTGATGGAATAATCCCATGTGCTGTTCCCTTGTGGTTGGACCCTTACGATGTTCTTCAGTGTC
 ATGACCCAGACTATGCCAAGATTCTCCTGAAAAGACAAGATCCAAAAAGTCTGTAGCCACAAAATCCT
 TGAATCCTGGTTGGTCGAGGACTTGTGACCCTGGATGGTTCTAAATGAAAAAGCACCGCCAGATTGTG
 AAACCTGGCTTCAACATCAGCATTCTGAAAATATTCATCACCATGATGTCTGAGAGTGTTCGGATGATGC
 TGAACAAATGGGAGGAACACATTGCCAAAACCTCAGTCTGGAGCTCTTCAACATGTCTCCCTGATGAC
 CCTGGACAGCATCATGAAGTGTGCTTCCAGCCACCAGGCGCATCCAGTTGGACAGTACCCTGGACTCA
 TACCTGAAAGCAGTGTTCACCTTAGCAAAATCTCCAACCAGCGATGAACAATTTTCTACATCACAAAG
 ACCTGGTTTTCAATTCAGCTCTCAAGGCCAAATCTTTTCTAAATTTAACCAAGAACTTCATCAGTTTAC
 AGAGAAAGTAATCCAGGACCGGAAGGAGTCTTTAAGGATAAGCTAAAACAAGATACTACTCAGAAAAGG
 CGCTGGGATTTTCTGGACATACTTTGAGTGCCAAAAGCGAAAACACCAAGATTTCTCTGAAGCAGATC
 TCCAGGCTGAAGTGAACCGTTCATGTTTGAGGACATGACACCACATCCAGTGTATCTCCTGGATCCT
 TTAAGTCTGGCAAGTACCCTGAGCATCAGCAGAGATGCCGAGATGAAATCAGGAACTCCTAGGGGAT
 GGGTCTTCTATTACCTGGGAACACCTGAGCCAGATGCCTTACACCACGATGTGCATCAAGGAATGCCTCC
 GCCTCTACGCACCGGTAGTAAACATATCCCGTTACTCGACAAACCCATTACTTTTCCAGATGGACGCTC
 CTTACCTGCAGGAATAACTGTGTTTATCAATATTTGGGCTCTTACCACAAACCCCTATTTCTGGGAAGAC
 CCTCAGGTCTTTAACCCCTTGAGATTCTCCAGGAAAAATTCTGAAAAAATACATCCCTATGCCTTACAT
 CATTCTCAGTGGATTAAGGAACTGCATTGGGCAGCATTGTCATAATTGAGTGTAAAGTGGCAGTGGC
 ATTAACCTGCTCCGCTTCAAGCTGGCTCCAGACCACTCAAGGCCTCCCCAGCCTGTTCTCAAGTTGTC
 CTAAGTCCAAGAATGGAATCCATGTGTTTCAAAAAAAGTTTGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC213223 representing NM_178134
 Red=Cloning site Green=Tags(s)

MEPSWLQELMAHPFLLLILLCMSLLLFQVIRLYQRRRWIRALHLFPAPPAHWFYGHKEFYVPVKEFEVYH
 KLMEKYPCAVPLWVGPFTMFFSVHDPDYAKILLKRQDPKSAVSHKILESWWGRGLVTLDGSKWKKHRQIV
 KPGFNISILKIFITMMSESVRMMLNKWEEHIAQNSRLELFQHVSLMTLDSIMKCAFSHQGSIQLDSTLDS
 YLKAVFNLSKISNQRMNFLHHNDLVFKFSSQGQIFSKFNQELHQFTEKVIQDRKESLKDCLKQDQTQKR
 RWDFLDILLSAKSENTKDFSEADLQAEVKTFMAGHDTTSSAISWILYCLAKYPEHQQRCDREIRELLGD
 GSSITWEHLSQMPYTTMCIKECLRLYAPVVNISRLLDKPIITFPDGRSLPAGITVFINIWAHHPYFVED
 PQVFNPLRFSRENSKIHYPYAFIPFSAGLRNCIGQHFAIECKVAVALTLRFLKAPDHSRPPQVPRQVV
 LKSKNGIHVFAKKVC

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk6476_c03.zip

Restriction Sites:

SgfI-MluI

Cloning Scheme:


ACCN: NM_178134

ORF Size: 1515 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_178134.3](#)

RefSeq Size: 1907 bp

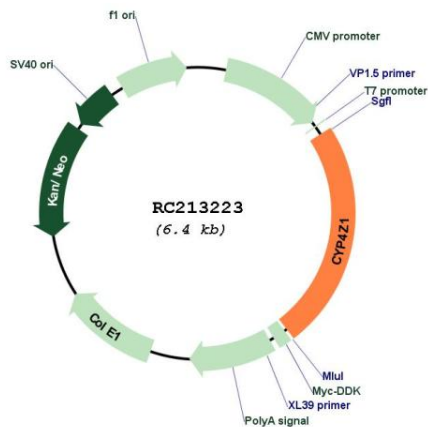
RefSeq ORF: 1518 bp

Locus ID: 199974

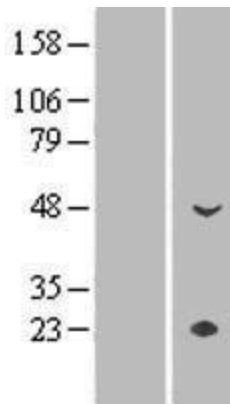
UniProt ID: [Q86W10](#)
Cytogenetics: 1p33
Protein Families: Druggable Genome, P450, Transmembrane
MW: 58.9 kDa

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 1p33. [provided by RefSeq, Jul 2008]

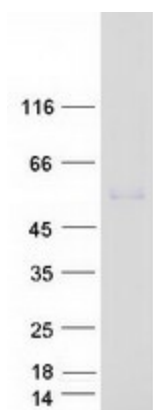
Product images:



Circular map for RC213223



Western blot validation of overexpression lysate (Cat# [LY405940]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC213223 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified CYP4Z1 protein (Cat# [TP313223]). The protein was produced from HEK293T cells transfected with CYP4Z1 cDNA clone (Cat# RC213223) using MegaTran 2.0 (Cat# [TT210002]).