

Product datasheet for RC207432L3

OriGene Technologies, Inc.

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Cytochrome P450 3A5 (CYP3A5) (NM_000777) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cytochrome P450 3A5 (CYP3A5) (NM 000777) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Cytochrome P450 3A5

Synonyms: CP35; CYPIIIA5; P450PCN3; PCN3

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-Myc-DDK-P2A-Puro (PS100092)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF

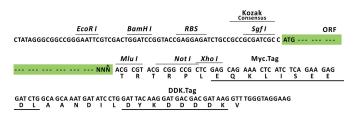
Sequence:

The ORF insert of this clone is exactly the same as(RC207432).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





st The last codon before the Stop codon of the ORF.

ACCN: NM_000777

ORF Size: 1506 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 customercom 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. <u>More info</u>

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: <u>NM 000777.2</u>

 RefSeq Size:
 1755 bp

 RefSeq ORF:
 1509 bp

 Locus ID:
 1577

 UniProt ID:
 P20815

 Cytogenetics:
 7q22.1

Domains: p450

Protein Families: Druggable Genome, P450, Transmembrane

Protein Pathways: Drug metabolism - cytochrome P450, Drug metabolism - other enzymes, Linoleic acid

metabolism, Metabolic pathways, Metabolism of xenobiotics by cytochrome P450, Retinol

metabolism

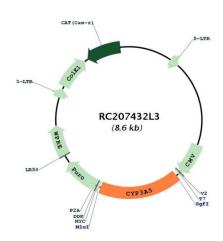
MW: 57.1 kDa



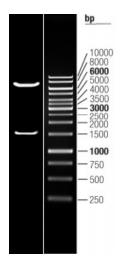
Gene Summary:

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. The encoded protein metabolizes drugs as well as the steroid hormones testosterone and progesterone. This gene is part of a cluster of cytochrome P450 genes on chromosome 7q21.1. Two pseudogenes of this gene have been identified within this cluster on chromosome 7. Expression of this gene is widely variable among populations, and a single nucleotide polymorphism that affects transcript splicing has been associated with susceptibility to hypertensions. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2014]

Product images:



Circular map for RC207432L3



Double digestion of RC207432L3 using Sgfl and Mlul $\,$