

Product datasheet for RC216416L1

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OriGene Technologies, Inc.

CYP21A2 (NM_000500) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: CYP21A2 (NM 000500) Human Tagged Lenti ORF Clone

Tag: Myc-DDK Symbol: CYP21A2

Synonyms: CA21H; CAH1; CPS1; CYP21B; P450c21B

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

ORF Nucleotide The ORF insert of this clone is exactly the same as(RC216416).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





^{*} The last codon before the Stop codon of the ORF

ACCN: NM_000500

ORF Size: 1485 bp





CYP21A2 (NM_000500) Human Tagged Lenti ORF Clone - RC216416L1

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: <u>NM 000500.5</u>

 RefSeq Size:
 2131 bp

 RefSeq ORF:
 1488 bp

 Locus ID:
 1589

 UniProt ID:
 P08686

Cytogenetics: 6p21.33

Domains: p450

Protein Families: Druggable Genome, P450

Protein Pathways: C21-Steroid hormone metabolism, Metabolic pathways

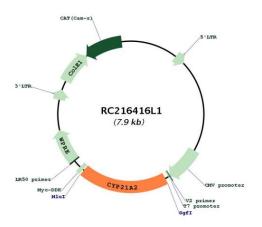
MW: 56 kDa

Gene Summary: This gene encodes a member of the cytochrome P450 superfamily of enzymes. The

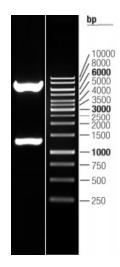
cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and hydroxylates steroids at the 21 position. Its activity is required for the synthesis of steroid hormones including cortisol and aldosterone. Mutations in this gene cause congenital adrenal hyperplasia. A related pseudogene is located near this gene; gene conversion events involving the functional gene and the pseudogene are thought to account for many cases of steroid 21-hydroxylase deficiency. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC216416L1



Double digestion of RC216416L1 using Sgfl and Mlul