

Product datasheet for RC202172L1V

OriGene Technologies, Inc.

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Cytochrome P450 Reductase (POR) (NM_000941) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type: Lentiviral Particles

Product Name: Cytochrome P450 Reductase (POR) (NM_000941) Human Tagged ORF Clone Lentiviral Particle

Symbol: Cytochrome P450 Reductase

Synonyms: CPR; CYPOR; P450R

Mammalian Cell None

Selection:

Vector: pLenti-C-Myc-DDK (PS100064)

Tag: Myc-DDK

ACCN: NM_000941

ORF Size: 2040 bp

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC202172).

OTI Disclaimer:

Sequence:

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.

RefSeq: <u>NM 000941.2</u>, <u>NP 000932.1</u>

 RefSeq Size:
 2509 bp

 RefSeq ORF:
 2043 bp

 Locus ID:
 5447

 UniProt ID:
 P16435

 Cytogenetics:
 7q11.23

Domains: flavodoxin, NAD_binding_1, FAD_binding_1





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Protein Families: Druggable Genome, P450, Transmembrane

MW: 77.1 kDa

Gene Summary: This gene encodes an endoplasmic reticulum membrane oxidoreductase that is essential for

multiple metabolic processes, including reactions catalyzed by cytochrome P450 proteins for metabolism of steroid hormones, drugs and xenobiotics. The encoded protein has a flavin adenine dinucleotide (FAD)-binding domain and a flavodoxin-like domain which bind two cofactors, FAD and FMN, that allow it to donate electrons directly from NADPH to all microsomal P450 enzymes. Mutations in this gene cause a complex set of disorders, including apparent combined P450C17 and P450C21 deficiency, amenorrhea and disordered

steroidogenesis, congenital adrenal hyperplasia and Antley-Bixler syndrome, that resemble those caused by defects in steroid metabolizing enzymes such as aromatase, 21-hydroxylase,

and 17 alpha-hydroxylase. [provided by RefSeq, Aug 2020]