

### Product datasheet for RC211377L1

#### OriGene Technologies, Inc.

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## Cytochrome p450 2C19 (CYP2C19) (NM\_000769) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Cytochrome p450 2C19 (CYP2C19) (NM 000769) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Cytochrome p450 2C19

Synonyms: CPCJ; CYP2C; CYPIIC17; CYPIIC19; P450C2C; P450IIC19

Mammalian Cell None

Selection:

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

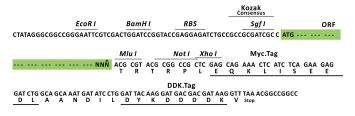
**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC211377).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





<sup>\*</sup> The last codon before the Stop codon of the ORF

**ACCN:** NM\_000769

ORF Size: 1470 bp



#### Cytochrome p450 2C19 (CYP2C19) (NM\_000769) Human Tagged Lenti ORF Clone - RC211377L1

**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 000769.1</u>

RefSeq Size: 1473 bp
RefSeq ORF: 1473 bp
Locus ID: 1557

 UniProt ID:
 P33261

 Cytogenetics:
 10q23.33

**Domains:** p450

**Protein Families:** Druggable Genome

**Protein Pathways:** Arachidonic acid metabolism, Drug metabolism - cytochrome P450, Linoleic acid metabolism,

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

**MW:** 55.8 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 is known to metabolize many xenobiotics, including the

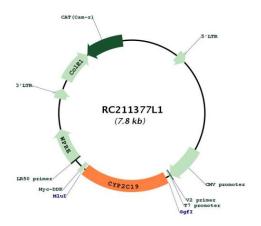
anticonvulsive drug mephenytoin, omeprazole, diazepam and some barbiturates.

Polymorphism within this gene is associated with variable ability to metabolize mephenytoin, known as the poor metabolizer and extensive metabolizer phenotypes. The gene is located within a cluster of cytochrome P450 genes on chromosome 10q24. [provided by RefSeq, Jul

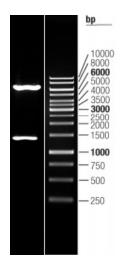
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# **Product images:**



Circular map for RC211377L1



Double digestion of RC211377L1 using Sgfl and Mlul  $\,$