

### Product datasheet for RC221660L3

#### OriGene Technologies, Inc.

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## Cytochrome P450 2D6 (CYP2D6) (NM\_001025161) Human Tagged Lenti ORF Clone

**Product data:** 

**Product Type:** Expression Plasmids

Product Name: Cytochrome P450 2D6 (CYP2D6) (NM 001025161) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Cytochrome P450 2D6

Synonyms: CPD6; CYP2D7AP; CYP2D7BP; CYP2D7P2; CYP2D8P2; CYP2DL1; CYPIID6; P450-DB1;

P450C2D; P450DB1

Mammalian Cell

Selection:

Puromycin

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

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

**ORF Nucleotide** 

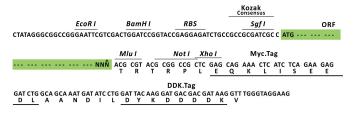
The ORF insert of this clone is exactly the same as(RC221660).

Sequence:

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:** 





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

**ACCN:** NM 001025161

ORF Size: 1338 bp



#### Cytochrome P450 2D6 (CYP2D6) (NM\_001025161) Human Tagged Lenti ORF Clone - RC221660L3

**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 001025161.1</u>

 RefSeq Size:
 1520 bp

 RefSeq ORF:
 1341 bp

 Locus ID:
 1565

 UniProt ID:
 P10635

Cytogenetics: 22q13.2

**Protein Families:** Druggable Genome, P450, Transmembrane

**Protein Pathways:** Drug metabolism - cytochrome P450

**MW:** 50.1 kDa

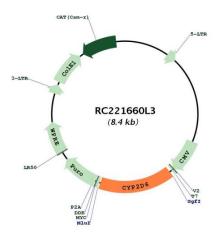
**Gene Summary:** This gene encodes a member of the cytochrome P450 superfamily of enzymes. The

cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and is known to metabolize as many as 25% of commonly prescribed drugs. Its substrates include antidepressants, antipsychotics, analgesics and antitussives, beta adrenergic blocking agents, antiarrythmics and antiemetics. The gene is highly polymorphic in the human population; certain alleles result in the poor metabolizer phenotype, characterized by a decreased ability to metabolize the enzyme's substrates. Some individuals with the poor metabolizer phenotype have no functional protein since they carry 2 null alleles whereas in other individuals the gene is absent. This gene can vary in copy number and individuals with the ultrarapid metabolizer phenotype can have 3 or more active copies of the gene. Alternatively spliced transcript variants encoding different isoforms have

been found for this gene. [provided by RefSeq, Jul 2014]



# **Product images:**



Circular map for RC221660L3