

Product datasheet for RC222995L3

OriGene Technologies, Inc.

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Cytochrome P450 2A6 (CYP2A6) (NM_000762) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cytochrome P450 2A6 (CYP2A6) (NM_000762) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Cytochrome P450 2A6

Synonyms: CPA6; CYP2A; CYP2A3; CYPIIA6; P450C2A; P450PB

Mammalian Cell

Selection:

Puromycin

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

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

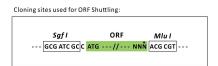
ORF Nucleotide The ORF insert of this clon

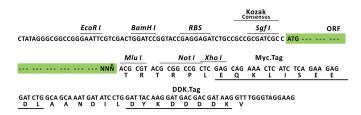
Sequence:

The ORF insert of this clone is exactly the same as(RC222995).

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_000762

ORF Size: 1482 bp



Cytochrome P450 2A6 (CYP2A6) (NM_000762) Human Tagged Lenti ORF Clone - RC222995L3

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 000762.4</u>

 RefSeq Size:
 1775 bp

 RefSeq ORF:
 1485 bp

 Locus ID:
 1548

 UniProt ID:
 P11509

Domains: p450

Cytogenetics:

Protein Families: Druggable Genome, P450, Transmembrane

19q13.2

Protein Pathways: Caffeine metabolism, Drug metabolism - cytochrome P450, Drug metabolism - other

enzymes, Metabolic pathways, Retinol metabolism

MW: 56.5 kDa

Gene Summary: This gene, CYP2A6, 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 its expression is induced by phenobarbital. The enzyme is known to hydroxylate coumarin, and also metabolizes nicotine, aflatoxin B1, nitrosamines, and some pharmaceuticals. Individuals with certain allelic variants are said to have a poor metabolizer phenotype, meaning they do not efficiently metabolize coumarin or nicotine. This gene is part of a large cluster of cytochrome P450 genes from the CYP2A, CYP2B and CYP2F subfamilies on chromosome 19q. The gene was formerly referred to as CYP2A3; however, it

has been renamed CYP2A6. [provided by RefSeq, Jul 2008]