

Product datasheet for RC221636L4

OriGene Technologies, Inc.

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Cytochrome P450 1A2 (CYP1A2) (NM_000761) Human Tagged Lenti ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: Cytochrome P450 1A2 (CYP1A2) (NM_000761) Human Tagged Lenti ORF Clone

Tag: mGFP

Symbol: Cytochrome P450 1A2

Synonyms: CP12; CYPIA2; P3-450; P450(PA)

Mammalian Cell

Selection:

Puromycin

Vector: pLenti-C-mGFP-P2A-Puro (PS100093)

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

ORF Nucleotide

The ORF insert of this clone is exactly the same as(RC221636).

Sequence:

Restriction Sites: Sgfl-Mlul

Cloning Scheme:





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

ACCN: NM_000761

ORF Size: 1548 bp



Cytochrome P450 1A2 (CYP1A2) (NM_000761) Human Tagged Lenti ORF Clone - RC221636L4

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 000761.3</u>, <u>NP 000752.2</u>

RefSeq Size:3127 bpRefSeq ORF:1551 bpLocus ID:1544

 UniProt ID:
 P05177

 Cytogenetics:
 15q24.1

Domains: p450

Protein Families: Druggable Genome, P450, Transmembrane

Protein Pathways: Caffeine metabolism, Drug metabolism - cytochrome P450, Linoleic acid metabolism,

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

Tryptophan metabolism

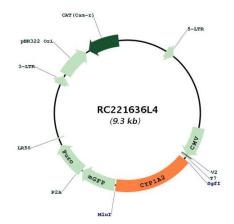
MW: 58.2 kDa

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

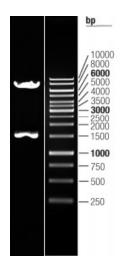
cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. The protein encoded by this gene localizes to the endoplasmic reticulum and its expression is induced by some polycyclic aromatic hydrocarbons (PAHs), some of which are found in cigarette smoke. The enzyme's endogenous substrate is unknown; however, it is able to metabolize some PAHs to carcinogenic intermediates. Other xenobiotic substrates for this enzyme include caffeine, aflatoxin B1, and acetaminophen. The transcript from this gene contains four Alu sequences flanked by direct repeats in the 3' untranslated region. [provided by RefSeq, Jul 2008]



Product images:



Circular map for RC221636L4



Double digestion of RC221636L4 using Sgfl and Mlul $\,$