

# Product datasheet for RC211019L4

# CYP7A1 (NM\_000780) Human Tagged Lenti ORF Clone

### **Product data:**

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Product Type:	Expression Plasmids
Product Name:	CYP7A1 (NM_000780) Human Tagged Lenti ORF Clone
Tag:	mGFP
Symbol:	CYP7A1
Synonyms:	CP7A; CYP7; CYPVII
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-mGFP-P2A-Puro (PS100093)
E. coli Selection:	Chloramphenicol (34 ug/mL)
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC211019).
<b>Restriction Sites:</b>	Sgfl-Mlul
Cloning Scheme:	
	Cloning sites used for ORF Shuttling:
	Sgf I         ORF         Mlu I            GCG ATC GC         ATG //         NNN         ACG CGT



ACCN: ORF Size: NM\_000780 1512 bp

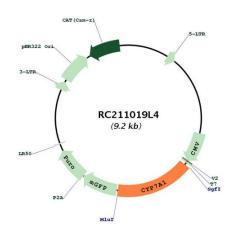


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<b>ORIGENE</b> CYP7A1 (NM_000780) Human Tagged Lenti ORF Clone – RC211019L4	
OTI Disclaimer:	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same 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. <u>More info</u>
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:	<ol> <li>Centrifuge at 5,000xg for 5min.</li> <li>Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>Close the tube and incubate for 10 minutes at room temperature.</li> <li>Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>
RefSeq:	<u>NM 000780.2</u>
RefSeq Size:	2875 bp
RefSeq ORF:	1515 bp
Locus ID:	1581
UniProt ID:	<u>P22680</u>
Cytogenetics:	8q12.1
Protein Families:	Druggable Genome, ES Cell Differentiation/IPS, P450, Transmembrane
Protein Pathways:	Metabolic pathways, PPAR signaling pathway, Primary bile acid biosynthesis
MW:	57.7 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 endoplasmic reticulum membrane protein catalyzes the first reaction in the cholesterol catabolic pathway in the liver, which converts cholesterol to bile acids. This reaction is the rate limiting step and the major site of regulation of bile acid synthesis, which is the primary mechanism for the removal of cholesterol from the body. Polymorphisms in the promoter of this gene are associated with defects in bile acid synthesis. [provided by RefSeq, Feb 2010]

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# **Product images:**



Circular map for RC211019L4

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