

## **Product datasheet for RC220445L3**

#### OriGene Technologies, Inc.

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### Liver Carboxylesterase 1 (CES1) (NM\_001025195) Human Tagged Lenti ORF Clone

### **Product data:**

**Product Type:** Expression Plasmids

Product Name: Liver Carboxylesterase 1 (CES1) (NM\_001025195) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: Liver Carboxylesterase 1

Synonyms: ACAT; CE-1; CEH; CES2; hCE-1; HMSE; HMSE1; PCE-1; REH; SES1; TGH

Mammalian Cell Puromycin

Selection:

**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(RC220445).

Sequence:

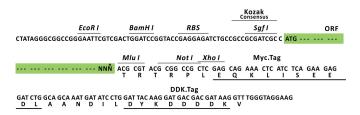
Sgfl-Mlul

Restriction Sites: Cloning Scheme:

Cloning sites used for ORF Shuttling:

Sgf 1 ORF Mlu I

----GCG ATC GCC ATG ---//--- NNN ACG CGT ---



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

**ACCN:** NM\_001025195

ORF Size: 1704 bp





**OTI Disclaimer:** 

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at <a href="mailto:customercom">customercom</a> or by calling 301.340.3188 option 3 for pricing and delivery.

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:

Cytogenetics:

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 001025195.1</u>

 RefSeq Size:
 2027 bp

 RefSeq ORF:
 1707 bp

 Locus ID:
 1066

 UniProt ID:
 P23141

**Protein Families:** Druggable Genome

**Protein Pathways:** Drug metabolism - other enzymes

16q12.2

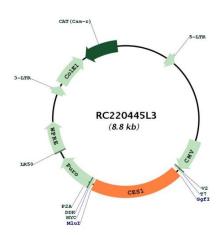
**MW:** 62.59 kDa



#### **Gene Summary:**

This gene encodes a member of the carboxylesterase large family. The family members are responsible for the hydrolysis or transesterification of various xenobiotics, such as cocaine and heroin, and endogenous substrates with ester, thioester, or amide bonds. They may participate in fatty acyl and cholesterol ester metabolism, and may play a role in the bloodbrain barrier system. This enzyme is the major liver enzyme and functions in liver drug clearance. Mutations of this gene cause carboxylesterase 1 deficiency. Three transcript variants encoding three different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]

# **Product images:**



Circular map for RC220445L3