

Product datasheet for **SC322423**

Liver Carboxylesterase 1 (CES1) (NM_001025194) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Liver Carboxylesterase 1 (CES1) (NM_001025194) Human Untagged Clone
Tag:	Tag Free
Symbol:	Liver Carboxylesterase 1
Synonyms:	ACAT; CE-1; CEH; CES2; hCE-1; HMSE; HMSE1; PCE-1; REH; SES1; TGH
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



[View online »](#)

Fully Sequenced ORF: >NCBI ORF sequence for NM_001025194, the custom clone sequence may differ by one or more nucleotides

```

ATGTGGCTCCGTGCCTTTATCCTGGCCACTCTCTGCTTCCGCGGCTTGGGGGCATCCGTCCTCGCCAC
CTGTGGTGGACACCGTGCATGGCAAAGTCTGGGGAAGTTCGTCAGCTTAGAAGGATTTGCACAGCCTGT
GGCCATTTTCTGGGAATCCCTTTTCCCAAGCCGCTCTTGGACCCTGAGGTTTTACTCCACCCGAGCCT
GCAGAACCATGGAGCTTTGTGAAGAATGCCACCTCGTACCCTCCTATGTGCACCCAAGATCCCAAGGCGG
GGCAGTTACTCTCAGAGCTATTTACAAACC GAAAGGAGAACATTCTCTCAAGCTTTCTGAAGACTGTCT
TTACCTCAATATTTACACTCCTGCTGACTTGACCAAGAAAAACAGGCTGCCGGTGATGGTGTGGATCCAC
GGAGGGGGGCTGATGGTGGGTGCGGCATCAACCTATGATGGGCTGGCCCTTGCTGCCCATGAAAACGTGG
TGGTGGTGACCATTCAATATCGCTGGGCATCTGGGGATTCTTCAGCACAGGGGATGAACACAGCCGGG
GAACTGGGGTACCTGGACCAGGTGGCTGCCCTGCGCTGGGTCCAGGACAACATTGCCAGCTTTGGAGGG
AACCCAGGCTCTGTGACCATCTTTGGAGAGTCAGCGGGAGGAGAAAGTGTCTCTGTTCTTGTGTTTGTCTC
CATTGGCCAAGAACCTTCCACCGGGCCATTTCTGAGAGTGGCGTGGCCCTCACTTCTGTTCTGGTGAA
GAAAGGTGATGTCAAGCCCTTGGCTGAGCAAATTGCTATCACTGCTGGGTGCAAAACCACCACCTCTGCT
GTCATGGTTCACCTGCGACAGAAGACGGAAGAGGAGCTTTGGAGACGACATTGAAAATGAAATTCT
TATCTCTGGACTTACAGGGAGACCCAGAGAGAGTCAACCCCTTCTGGGCACTGTGATTGATGGGATGCT
GCTGCTGAAAACCTGAAGAGCTTCAAGCTGAAAGGAATTTCCACACTGTCCCTTACATGGTCGGAATT
ACAAGCAGGAGTTTGGCTGGTTGATTCCAATGCAAGTTGATGAGCTATCCACTCTCCGAAGGGCAACTGG
ACCAGAAGACAGCCATGTCACTCCTGTGGAAGTCTATCCCTTGTTCATTGCTAAGGAACTGATTCC
AGAAGCCACTGAGAAATACTTAGGAGGAACAGACGACTGTCAAAAAGAAAGACCTGTTCTGGACTTG
ATAGCAGATGTGATGTTTGGTGTCCCCTGTGATTGTGGCCCGGAACCCACAGAGATGCTGGAGCACCCA
CCTACATGTATGAGTTTCAGTACCGTCCAAGCTTCTCATCAGACATGAAACCCAAGACGGTGATAGGAGA
CCACGGGGATGAGCTCTTCTCCGCTTTTGGGGCCCATTTTTTAAAAGAGGGTGCCTCAGAAGAGGAGATC
AGACTTAGCAAGATGGTATGAAATTCTGGGCCAACTTTGCTCGCAATGGAAACCCCAATGGGGAAGGGC
TGCCCCACTGGCCAGAGTACAACCAGAAGGATATCTGCAGATTGGTGCCAACACCCAGGCGGCCCA
GAAGCTGAAGGACAAAGAAGTAGCTTTCTGGACCAACCTTTGCCAAGAAGGCAGTGGAGAAGCCACCC
CAGACAGAACACATAGAGCTGTGA
    
```

Restriction Sites: RsrII-NotI

ACCN: NM_001025194

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 custsupport@origene.com 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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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 style="list-style-type: none"> 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_001025194.1</u> , <u>NP_001020365.1</u>
RefSeq Size:	2024 bp
RefSeq ORF:	1704 bp
Locus ID:	1066
UniProt ID:	<u>P23141</u>
Cytogenetics:	16q12.2
Protein Families:	Druggable Genome
Protein Pathways:	Drug metabolism - other enzymes
Gene Summary:	<p>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 blood-brain 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]</p> <p>Transcript Variant: This variant (2) uses a different in-frame splice site at the end of a coding exon compared to variant 1. The resulting isoform (b) has the same N- and C-termini but is shorter by 1 aa compared to isoform a.</p>