

Product datasheet for **SC100049**

Carboxylesterase 7 (CES5A) (NM_145024) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Carboxylesterase 7 (CES5A) (NM_145024) Human Untagged Clone
Tag:	Tag Free
Symbol:	Carboxylesterase 7
Synonyms:	CAUXIN; CES4C1; CES5; CES7; HEL126
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_145024, the custom clone sequence may differ by one or more nucleotides

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ATGAGTGGGAATTGGGTGCACCCAGGCCAGATCCTAATTTGGGCTATCTGGGTCTTGCAGCCCCACCA
AAGGGCCTTCTGCTGAAGGGCCACAGAGGAACACCAGGCTGGGATGGATTCAGGGCAAGCAAGTCACTGT
GCTGGGAAGCCCTGTGCCTGTGAACGTGTTCTCGGAGTCCCCTTTGCTGCTCCCCGCTGGGATCCCTG
CGATTTACGAACCCGAGCCTGCATCGCCCTGGGATAAATTGCGAGAAGCCACCTCTACCTAATTTGT
GCCTCCAGAACTCAGAGTGGCTGCTCTTAGATCAACATATGCTCAAGGTGCATTACCCGAAATTCGGAGT
GTCAGAAGACTGCCTCTACCTGAACATCTATGCGCCTGCCACGCGGATACAGGCTCCAAGCTCCCCGTC
TTGGTGTGGTTCCAGGAGGTGCCTTCAAGACTGGCTCAGCCTCCATCTTTGATGGGTCCGCCCTGGCTG
CCTATGAGGACGTGCTGGTTGTGGTCGTCCAGTACCGGCTAGGAATATTTGGTTTCTTACCACATGGGA
TCAGCATGCTCCGGGAACTGGGCCTTCAAGGACCAGGTGGTGTCTGTCTGGGTCCAGAAGAATCATC
GAGTTCTTCGGTGGGACCCAGCTCTGTGACCATCTTTGGCGAGTCCGCGGGAGCCATAAGTGTCTTA
GTCTTATACTGTCTCCCATGGCCAAAGGCTTATCCACAAGCCATCATGGAGAGTGGGGTGGCCATCAT
CCTTACCTGGAGGCCATGATTATGAGAAGAGTGAGGACCTGCAGGTGGTTGCACATTTCTGTGGTAAC
AATGCGTCAGACTCTGAGGCCCTGCTGAGGTGCCTGAGGACAAAACCCCTCCAAGGAGCTGCTGACCCCTA
GCCAGAAAACAAAGTCTTCACTCGAGTGGTTGATGGTGTCTTCTTCTAATGAGCCTCTAGATCTATT
GTCTCAGAAAGCATTAAAGCAATTCCTTCCATCATCGGAGTCAATAACCACGAGTGTGGCTTCTGCTG
CCTATGAAGGAGGCTCCTGAGATCCTCAGTGGCTCCAACAAGTCCCTGCCCTCCATCTGATACAAAACA
TCCTGCACATCCCGCCTCAGTATTTGCACCTTGTGGCTAATGAATACTCCATGACAAGCACTCCCTGAC
TGAATCCGAGACAGTCTTCTGGACTTGTGGAGATGTGTTCTTTGTGGTCCCTGCATGATCACAGCT
CGATATCACAGAGAAGGAGCCACGGAGGAGGAGAAGTTACTGAGCCGGAAGATGATGAAATACTGGGCTA
CCTTTGCTCGAACCGGGAATCCTAATGGGAACGACCTGTCTCTGTGGCCAGCTTATAATCTGAGCA
GTACCTCCAGCTGGACTTGAACATGAGCCTCGGACAGAGACTCAAAGAACCAGCGGGTGGATTTTTGGACC
AGCACCATCCCCCTGATCCTGTCTGCCTCCGACATGCTCCACAGTCTCTTTCTTCTTAACTTTCTCT
CTCTCCTCCAGCCTTTCTTTTCTTTTGTGCTCCTTGA
    
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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_145024 unedited

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GGATTTTGAATACGACTCACTTATAGGGCGGCCGATTTCGGCACGAGGATTCTCATG
CCTCAGCCTCGCGAGTAGCTGGAATTACAGGCATTGCTGTGCTGGGAAGGAATGCTTAA
CCTGCCACAGCCATGTTGTGATTATGAAGGGAGCCAACCTGAGGACAAATCACATTTTCT
GAGGATGGCAAAGCAAACAGATGCAAAGATCCTGGGTCTTTGATGGCATTGTTGAGTTGC
TGGACAGCTTCCCTACTTTTACGTTTCTATGACACAATGTTATCATCGTCTTGTGTA
TCAGCCAGGGGCTTCTGCTGAAGGGCCACAGAGGAACACCAGGCTGGGATGGATTGAG
GCAAGCAAGTCACTGTGCTGGGAAGCCCTGTGCCTGTGAACGTGTTCTCCTGGAGTCCCCT
TTGCTGCTCCCCGCTGGGATCCCTGCGATTTACGAACCCGAGCCTGCATCGCCCTGGG
ATAACTTTCGAGAAGCCACCTCCTACCCTAATTTGTGCCTCCAGAACTCAGAGTGGCTGC
TCTTAGATCAACACATGCTCAAGGTGCATTACCCGAAATTCGGAGTGTGAGAAGACTGCC
TCTACCTGAACATCTATGCGCCTGCCACGCGGATACAGGCTCCAAGCTCCCCGCTTTGG
GTGTGGTTCCAGGAGGTGCCTTCAAGACTGGCTCAGCCTCCATCTTTGATGGGTCCGCC
CTGGCTGCTATGANGACGTTGCTGTTGTTGGTCGTCCAGTACCGGCTAGGAATATTTTGT
TTCTTACACATGGGATCAGCATGCTCCGNGAAACTGGCCTTCCAGGACCCAGTGGCTGC
CTGTNCCTGGTCCAGAAAACATCAGTTCTTTCCGGTGGGGACCCGCTCTGTGACCATCT
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Restriction Sites: NotI-NotI

ACCN: NM_145024

Insert Size: 3700 bp

OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	NM_145024.1 , NP_659461.1
RefSeq Size:	1962 bp
RefSeq ORF:	1578 bp
Locus ID:	221223
UniProt ID:	Q6NT32
Cytogenetics:	16q12.2
Domains:	COesterase
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 also participate in fatty acyl and cholesterol ester metabolism, and may play a role in the blood-brain barrier system. This gene, also called CES5, is predominantly expressed in peripheral tissues, including brain, kidney, lung and testis. It encodes a secreted enzyme. Because of high levels in the urine of male domestic cats, this enzyme is also called cauxin (carboxylesterase-like urinary excreted protein). The enzyme functions in regulating the production of a pheromone precursor and may contribute to lipid and cholesterol transfer processes within male reproductive fluids. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]</p> <p>Transcript Variant: This variant (2) has an alternate 5' sequence, and omits an in-frame exon in the 3' CDS, as compared to variant 3. The resulting isoform (2) is shorter; has a different N-terminus and lacks an internal segment, as compared to isoform 3.</p>