

Product datasheet for SC111616

Citrate synthetase (CS) (NM_004077) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Citrate synthetase (CS) (NM_004077) Human Untagged Clone
Tag:	Tag Free
Symbol:	Citrate synthetase
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC111616 sequence for NM_004077 edited (data generated by NextGen Sequencing)

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ATGGCTTTACTTACTGCGCCGCCCGGCTCTTGGGAACCAAGAATGCATCTTGTCTTGT
CTTGCAGCCCGCATGCCAGTGCTTCTCCACGAATTTGAAAGACATATTGGCTGACCTG
ATACCTAAGGAGCAGGCCAGAATTAAGACTTTCAGGCAGCAACATGGCAAGACGGTGGT
GGCCAAATCACTGTGGACATGATGTATGGTGGCATGAGAGGCATGAAGGGATTGGTCTAT
GAAACATCAGTCTTGATCCTGATGAGGGCATCCGTTTCCGAGGCTTTAGTATCCCTGAA
TGCCAGAAACTGCTACCCAAGGCTAAGGGTGGGGAAGAACCCCTGCCTGAGGGCTATTT
TGGCTGCTGGTAACTGGACATATCCCAACAGAGGAACAGGTATCTTGGCTCTCAAAGAG
TGGGCAAAGAGGGCAGCTCTGCCTTCCCATGTGGTCACCATGGCACAACCTTCCCACC
AATCTACACCCCATGTCTCAGCTCAGTGCAGCTTTACAGCCCTCAACAGTGAAAGTAA
TTTGCCTGAGCATATGCACAGGGTATCAGCCGAACCAAGTACTGGGAGTTGATTTATGAA
GACTCTATGGATCTAATCGCAAAGCTACCTTGTGTTGCAGCAAAGATCTACCGAAATCTC
TACAGAGAAGGCAGCGGTATTGGGGCCATTGACTCTAACCTGGACTGGTCTCACAATTT
ACCAACATGTTAGGCTATACTGATCATCAGTTCAGTCTCAGCTCACGCGCCTGTACCTCACC
ATCCACAGTGACCATGAGGGTGGCAATGTAAGTGCCCATACCAGCCATTTGGTGGGCAGT
GCCCTTCCGACCCTTACCTGCTCTTGCAGCAGCCATGAACGGGCTGGCAGGGCCTCTC
CATGGACTGGCAAATCAGGAAGTCTTGTCTGGCTAACACAGCTGCAGAAGGAAGTTGGC
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GTTGTTCCAGGCTATGGCCATGCAGTACTAAGGAAGACTGATCCGCGATATACCTGTCAG
CGAGAGTTTGCTCTGAAACACCTGCCTAATGACCCCATGTTTAAAGTTGGTTGCTCAGCTG
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GTAGATGCTCACAGTGGGGTGTGCTCCAGTATTATGGCATGACGGAGATGAATTACTAC
ACGGTCTGTTTGGGGTGTACAGGAGCATTGGGTGTACTGGCACAGCTCATCTGGAGCCGA
GCCTTAGGCTTCCCTCTAGAAAGGCCCAAGTCCATGAGCACAGAGGGTCTGATGAAGTTT
GTGGACTCTAAGTCAGGGTAA

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Clone variation with respect to NM_004077.2



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5' Read Nucleotide Sequence:	>OriGene 5' read for NM_004077 unedited NNNNNNNCCCNNGGCCACNNNNNCNGGTCCGAGATTTGTATACGACTCCTATAGGCG GCCGCGNAATTCGCACCAAGTCGGCGCGGCTCTGGTGCAGCGGCGGGCTCCTGTTCT GCCGCAGCTCTCTCCCTTTCTTACCTCCCCACCAGATCCCGGAGATCGCCCGCCATGGCT TTACTTACTGCGGCCGCCGGCTCTTGGGAACCAAGAATGCATCTTGTCTGTTCTTGCA GCCCGGCATGCCAGTGCTTCTCCACGAATTTGAAAGACATATTGGCTGACCTGATACCT AAGGAGCAGGCCAGAATTAAGACTTTTCAGGCAGCAACATGGCAAGACGGTGGTGGGCCAA ATCACTGTGGACATGATGTATGGTGGCATGAGAGGCATGAAGGGATTGGTCTATGAAACA TCAGTTCTTGATCCTGATGAGGGCATCCGTTTCCGAGGCTTTAGTATCCCTGAATGCCAG AAAGTGTACCCAAGGCTAAGGGTGGGGAAGAACCCTGCCTGAGGGCTATTTTGGCTG CTGGTAACTGGACATATCCCAACAGAGGAACAGGTATCTTGGCTCTAAAAGAGTGGCA AAGAGGGCAGCTCTGCCTTCCCATGTGGTCACCATGCTGGACAACCTTCCACCAATCTA CACCCCATGTCTCAGCTCAGTGCAGCTGTACAGCCCTCAACAGTAAAAGTAACTTTGCC CGAGCATATGCACAGGTATCAGCCGAACCAAGTACTGGGAGTTGATTTATGAAGACTCT ATGGATCTAATCGCANAGCTACCTTTGTGTGCAGCANAGATCTACCGAAATCTCTACAGA GAAGCAGCGGTATTGGGGCCATTGACTCTAACTGGACTGGTCTACAATTCACCACATG TTAGGCTATACTGATCATCAGTTCACTGAGCTCACGCGCTGTACCTCACATNCACAGTG ACCATGAGGGTGGGCAATGTTAAGTGCCATN
3' Read Nucleotide Sequence:	>OriGene 3' read for NM_004077 unedited TTTTTTTTTTTTTTGTAAATAAAAAACATTTATTTTGCATTTTATACAGAACAACCTGAAG TCTCCATCATGACTTGACAGTTACCCAGGGTTTACAGTGTGTCCAACCTCAACAGTGTGG TTCTGGGACTGGGTATCCACACAACACAGGCAGGAGTTTGGAGGAAAGATGGGGGCACA GCAGGAGTGTATCTTAATCCTTTCTCAAAGAAAAGAAGTAGAGCATTCTGAGTTGCTGA AAACCTGTGCAAATGGGGCTTCTGAAACATTGTACTGTGAGCTCTCAGGAAAGGGAGGA AAAAGATGTTGATAAATAAGGAGCAATTTCTTGGGCAGGGGACGAGGAGGGAGGCTTA CTATTTTTAATGCCCTCAGCCCCAGTACCTGATAATCAGAGGAGACCATGTCCAATCTTG AATCAATCCCTGTTCAAAAAGAGGTGCTAATACCCCGGGGACAAGACTCTGAAAATATC ATGCTGGTCATCCGGAGTTCTATGCCCCACAGCATATTAATAATGGGGTTGTGGGGGG
Restriction Sites:	NotI-NotI
ACCN:	NM_004077
Insert Size:	2800 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:	<u>NM_004077.2</u> , <u>NP_004068.2</u>

RefSeq Size:	2997 bp
RefSeq ORF:	1401 bp
Locus ID:	1431
UniProt ID:	<u>O75390</u>
Cytogenetics:	12q13.3
Domains:	citrate_synt
Protein Pathways:	Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism, Metabolic pathways
Gene Summary:	<p>The protein encoded by this gene is a Krebs tricarboxylic acid cycle enzyme that catalyzes the synthesis of citrate from oxaloacetate and acetyl coenzyme A. The enzyme is found in nearly all cells capable of oxidative metabolism. This protein is nuclear encoded and transported into the mitochondrial matrix, where the mature form is found. [provided by RefSeq, Jul 2008]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (a).</p>