

Product datasheet for **RG214479**

Citrate synthetase (CS) (NM_004077) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Citrate synthetase (CS) (NM_004077) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Citrate synthetase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG214479 representing NM_004077 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCTTTACTTACTGCGGCCGCCCGGCTCTTGGGAACCAAGAATGCATCTTGTCTTGTCTTGCAGCCC
GGCATGCCAGTGTCTTCTCCACGAATTTGAAAGACATATTGGCTGACCTGATACCTAAGGAGCAGGCCAG
AATTAAGACTTTTCAGGCAGCAACATGGCAAGACGGTGGTGGGCCAAATCACTGTGGACATGATGTATGGT
GGCATGAGAGGCATGAAGGGATTGGTCTATGAAACATCAGTTCTTGATCCTGATGAGGGCCTCCGTTTCC
GAGGCTTTAGTATCCCTGAATGCCAGAACTGCTACCCAAGGCTAAGGGTGGGGAAGAACCCTCGCTGA
GGCTTATTTTGGCTGCTGGTAACCTGGACATATCCCAACAGAGGAACAGGTATCTTGGCTCTCAAAGAG
TGGCAAAGAGGGCAGCTCTGCCTTCCCATGTGGTCACCATGCTGGACAACCTTCCCAACATCTACACC
CCATGTCTCAGCTCAGTGCAGCTGTTACAGCCCTCAACAGTGAAAGTAACTTTGCCCGAGCATATGCACA
GGGTATCAGCCGAACCAAGTACTGGGAGTTGATTTATGAAGACTCTATGGATCTAATCGCAAAGCTACCT
TGTGTTGCAGCAAAGATCTACCGAAATCTCTACAGAGAAGGCAGCGGTATTGGGGCCATTGACTCTAACC
TGGACTGGTCTCACAATTTACCAACATGTTAGGCTATACTGATCATCAGTTCACTGAGCTCACGCGCT
GTACCTCACCATCCACAGTGACCATGAGGGTGGCAATGTAAGTGGCCATACCAGCCATTTGGTGGGCAGT
GCCCTTTCGACCCTTACCTGTCTTTGCAGCAGCCATGAACGGGCTGGCAGGGCTCTCCATGGACTGG
CAAATCAGGAAGTCTTGTCTGGCTAACACAGCTGCAGAAGGAAGTTGGCAAAGATGTGTGATGAGAA
GTTACGAGACTACATCTGGAACCACTCAACTCAGGACGGGTTGTTCCAGGCTATGGCCATGCAGTACTA
AGGAAGACTGATCCGCGATATACCTGTCAGCGAGAGTTTGGCTCTGAAACACCTGCCTAATGACCCCATGT
TTAAGTTGGTTGCTCAGCTGTACAAGATTGTGCCCAATGTCTCTTAGAGCAGGGTAAAGCCAAGAATCC
TTGGCCAATGTAGATGCTCACAGTGGGTGCTGCTCCAGTATTATGGCATGACGGAGATGAATTACTAC
ACGGTCTGTTTGGGGTGTACAGCAGCATTGGGTGACTGGCACAGCTCATCTGGAGCCGAGCCTTAGGCT
TCCCTCTAGAAAGGCCAAGTCCATGAGCACAGAGGGTCTGATGAAGTTTGTGGACTCTAAGTCAGGG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG214479 representing NM_004077
 Red=Cloning site Green=Tags(s)

MALLTAAARLLGTKNASCLVLAARHASASSTNLKDILADLIPKEQARIKTRFQQHGKTVVGQITVDMMYG
 GMRGMKGLVYETSVLDPDEGIRFRGFSIPECQKLLPKAKGGEEPLPEGLFWLLVTGHIPTTEEQVSWLSKE
 WAKRAALPSHVVTMLDNFPTNLHPMSQLSAAVTALNSENFRARAYAQGISRTKYWELIYEDSMDLI AKLP
 CVAAKIYRNLYREGSGIGAIDS NLDWSHNFTNMLGYTDHQFTEL TRLYLTIHSDHEGGNVS AHTSHLVGS
 ALSDPYLSFAAAMNGLAGPLHGLANQEVLYVWLTQLQKEVGKDVSDKLRDYIWNTLNSGRVVPYGHAVL
 RKTDPRYTCQREFALKHLPNDP MFKLVAQLYKIVPNV LLEQKGAKNPWPNVDAHSGVLLQYYGMTEMNYY
 TVLFGVSRALGVLAQLIWSRALGFPLERP KSMSTEGLMKFVDSKSG

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_004077

ORF Size: 1398 bp

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. [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: 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: [NM_004077.3](#)

RefSeq Size: 2997 bp

RefSeq ORF: 1401 bp

Locus ID: 1431

UniProt ID: [O75390](#)

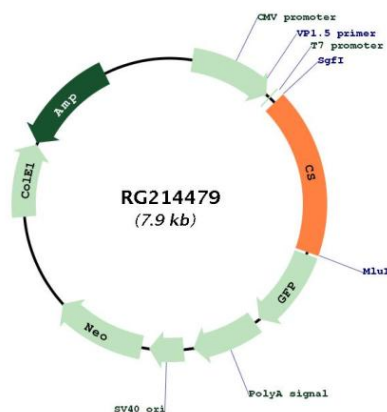
Cytogenetics: 12q13.3

Domains: citrate_synt

Protein Pathways: Citrate cycle (TCA cycle), Glyoxylate and dicarboxylate metabolism, Metabolic pathways

Gene Summary: 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]

Product images:



Circular map for RG214479