

## Product datasheet for RC203994

### PCYT2 (NM\_002861) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	PCYT2 (NM_002861) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PCYT2
Synonyms:	ET; SPG82
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC203994 representing NM_002861 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATCCGGAACGGGCGCGGGCTGCAGGCGGCGCAGAGCAGCCGGGCCCGGGGGCAGGCGCGCCGTGA  
GGGTGTGGTGGCATTGGCTGCTATGACATGGTGCATTACGGCCACTCCAACCAGCTGCGCCAGGCACGGGC  
CATGGGTGACTACCTCATCGTAGGCGTGACACCGATGAGGAGATCGCCAAGCACAAGGGGCCCGGGT  
TTCCTCAGGAGGAGAGATACAAGATGGTGCAGGCCATCAAATGGGTGGACGAGGTGGTCCAGCGGCTC  
CCTACGTCACACTAGAGACCCTGGACAAATACTGTGACTTCTGTGTTACAGGCAATGACATCAC  
CCTGACTGTAGATGGCCGGGACACCTATGAGGAAGTAAAGCAGGCTGGGAGGTACAGAGAATGCAAGCGC  
ACGCAAGGGGTGTCCACCACAGACCTCGTGGGCCGATGCTGCTGTTAACCAGCCATCACAGCAGCC  
AGGAGATGTCCTCTGAGTACCGGAGTATGCAGACAGTTTTGGCAAGTGCCTGGTGGCGGAACCCCTG  
GACCGGGGTATCCAGTTCCTGCAGACATCTCAGAAGATCATCCAGTTTGTCTGGGAAGGAGCCCAAG  
CCAGGGGAGACAGTATCTATGTGGTGGTGCCTTCGACCTGTTCCACATCGGGCATGTGGACTTCTGG  
AGAAGGTGCACAGGCTGGCAGAGAGGCCACATCATCGCGGGCTTACACTTTGACCAGGAGGTCAATCA  
CTACAAGGGGAAGAACTACCCATCATGAATCTGCATGAACGGACTCTGAGCGTGTGGCTGCCGTGAC  
GTGTCAGAAGTGGTATTGGAGCCCGTACGCGGTCACAGCAGAGCTCCTAAGTCACTTCAAGGTGGACC  
TGGTGTGTCACGGCAAGACAGAAATTATCCCTGACAGGGATGGCTCCGACCCATACCAGGAGCCCAAGAG  
AAGGGGATCTTCCGTCAGATTGACAGTGGCAGCAACCTCACCACAGACCTCATCGTCCAGCGGATCATC  
ACCAACAGGTTGGAGTATGAGGCGGAAACCAGAAGAAGGAAGCAAGGAGCTGGCTTCTGGAGGCTG  
CCAGGCAGCAGGCGGCACAGCCCTGGGGGAGCGCATGGTGACTTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC203994 representing NM\_002861  
Red=Cloning site Green=Tags(s)

MIRNGRGAAGGAEQPGPGRRRAVRVWCDGCDMVHYGHSNQLRQARAMGDYLIVGVHTDEEIAKHKGPPV  
 FTQEERYKMVQAIKWVDEVVPAAPYVTTLETLDKYNCDFCVHGNDITLTVDGRDTEEVKQAGRYRECKR  
 TQGVSTDLVGRMLLVTKAHSSQEMSSEYREYADSFQKCPGGRNPWTGVSQFLQTSQKIIQFASGKEPQ  
 PGETVIYVAGAFDLFHIGHVDFLEKVRHLAERPHIIAGLHFDQEVNHYKGKNYPIMNLHERTL SVLACRY  
 VSEVVIGAPYAVTAELLSHFKVDLVCHGKTEIIPDRDGSOPYQEPKRRGIFRQIDSGSNLTTDLIVQRII  
 TNRLEYEARNQKKEAKELAFLEAARQAAQPLGERDGDF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3219\\_d09.zip](https://cdn.origene.com/chromatograms/mg3219_d09.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_002861

**ORF Size:** 1167 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\\_002861.5](#)

**RefSeq Size:** 1856 bp

**RefSeq ORF:** 1170 bp

**Locus ID:** 5833

**UniProt ID:** [Q99447](#)

**Cytogenetics:** 17q25.3

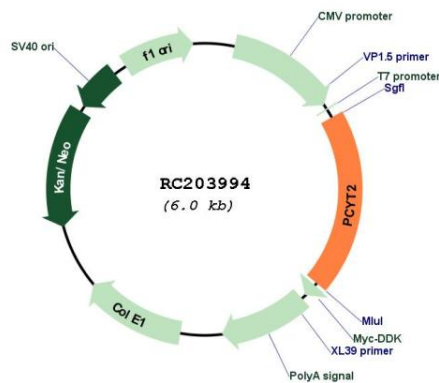
**Domains:** CTP\_transf\_2

**Protein Pathways:** Glycerophospholipid metabolism, Metabolic pathways

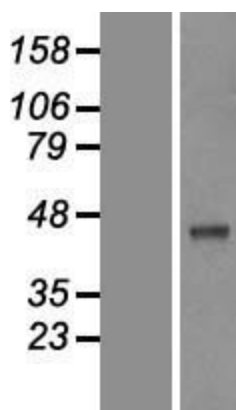
**MW:** 43.7 kDa

**Gene Summary:** This gene encodes an enzyme that catalyzes the formation of CDP-ethanolamine from CTP and phosphoethanolamine in the Kennedy pathway of phospholipid synthesis. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2010]

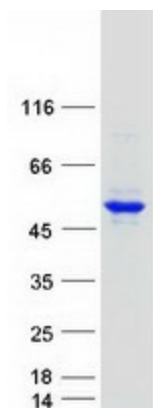
### Product images:



Circular map for RC203994



Western blot validation of overexpression lysate (Cat# [LY419054]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC203994 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PCYT2 protein (Cat# [TP303994]). The protein was produced from HEK293T cells transfected with PCYT2 cDNA clone (Cat# RC203994) using MegaTran 2.0 (Cat# [TT210002]).