

Product datasheet for SC117040

CTNS (NM_004937) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CTNS (NM_004937) Human Untagged Clone
Tag:	Tag Free
Symbol:	CTNS
Synonyms:	CTNS-LSB; PQLC4; SLC66A4
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC117040 sequence for NM_004937 edited (data generated by NextGen Sequencing)

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ATGATAAGGAATTGGCTGACTATTTTTATCCTTTTTCCCTGAAGCTCGTAGAGAAATGT
GAGTCAAGCGTCAGCCTCACTGTTCCCTCCTGTCGTAAGCTGGAGAACGGCAGCTCGACC
AACGTCAGCCTCACCCCTGCGGCCACCATTAAATGCAACCTGGTGATCACTTTTGAATC
ACATTCGTTCCAAAAATATTACTATCCTTGAGCTCCCGATGAAGTTGTGGTGCCTCCT
GGAGTGACAAACTCCTCTTTTCAAGTGACATCTCAAAATGTTGGACAACTTACTGTTTAT
CTACATGGAAATCACTCCAATCAGACCGGCCGAGGATACGCTTTCTTGTGATCCGCAGC
AGCGCCATTAGCATCATAAACCAGGTGATTGGCTGGATCTACTTTGTGGCCTGGTCCATC
TCCTTCTACCCTCAGGTGATCATGAATTGGAGGCGGAAAAGTGCATTGGTCTGAGCTTC
GACTTCGTGGCTCTGAACCTGACGGGCTTCGTGGCCTACAGTGTATTCAACATCGGCCTC
CTCTGGGTGCCCTACATCAAGGAGCAGTTTCTCCTCAAATACCCAACGGAGTGAACCC
GTGAACAGCAACGACGTCTTCTTCAGCCTGCACGCGGTTGTCCTCACGCTGATCATCATC
GTGCAGTGCTGCCTGTATGAGCGCGGTGGCCAGCGCGTGTCTGGCCTGCCATCGGCTTC
CTGGTGTCTCGCGTGGCTCTTCGCATTTGTACCATGATCGTGGCTGCAGTGGGAGTGATC
ACGTGGCTGCAGTTTCTTCTGCTTCTCCTACATCAAGCTCGCAGTCACGCTGGTCAAG
TATTTTCCACAGGCCTACATGAACCTTTACTACAAAAGCACTGAGGGCTGGAGCATTGGC
AACGTGCTCCTGGACTTACCGGGGGCAGCTTCAGCCTCCTGCAGATGTTCCCTCCAGTCC
TACAACAACGACCAGTGGACGCTGATCTTCGGAGACCCAACCAAGTTTGGACTCGGGGTC
TTCTCCATCGTCTTCGAGTTCGTCTTCTTCATCCAGCACTTCTGTTTGTACAGAAAGAGA
CCGGGGTATGACCAGCTGAACTAG

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Clone variation with respect to NM_004937.2
779 c=>t



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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_004937 unedited TGGAGCACCAGGGAGGCGGTGCATTCCCTGACCGGCACCTGGCGAGGCTCATGCGTCCCGT GAGGGCGGTTCCCTCGAGCCTGGGGGCGCTCAGATTGCTTTGGAGACGCTGAGAGAACCTT TGCGAGAGCGCCGGTTGACGTGCGGAGTGCGGGGCTCCGGGGGACTGAGCAGCACGAGAC CCCATCCTCCCCTCCGGGTTTTACACTGGGCGAAGGGAGGACTCCTGAGCTCTGCCTCT TCCAGTAACATTGAGGATTACTGTGTTTTGTGAGAGCTCGCTAGGCGCCCTAAGCAACAG AGTTCTGAGAAATCGAGAAACATGATAAGGAATTGGCTGACTATTTTTATCCTTTTTCCC CTGAAGCTCGTAGAGAAATGTGAGTCAAGCGTCAGCCTCACTGTTCCCTCCTGTCGTAAG CTGAGAACGGCAGCTCGACCAACGTCAGCCTCACCTGCGGCCACCATTAAATGCAACC CTGGTGATCACTTTTGAATCACATTTTCGTTCCAAAAATATTACTATCCTTGAGCTCCCC GATGAAGTTGTGGTGCCTCCTGGAGTGACAACTCCTTTTTCAAGTGACATCTCAAAAT GTTGGACAACCTACTGTTTATCTACATGGAAATCACTCCAATCAGACCGGCCGAGGATA CGCTTTCTTGATCCGCAGCAGCGCCATTAGCATCATANACCAGGTGATTGGCTGGATC TACTTTGTGGCCTGGTCCATCTNCTTCTACCCTCAGGTGATCATGAATTTGGAGCNGAAA GTGTCATTGGTCTGAGCTTCGACTTCGTGGCTCTGAACCTGACCGGCTTCGTGGCCTACA GTGATTNCACATCGGCCTCCTCTGGGTAGCCTACTCAAGGAGCAGTTCTCCTAAATAC CCAAN</p>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_004937 unedited TTTTTAGAAAGGAAAGCGAGTAGGTTTTAATCAAAAACAGGCCCTCGCGTTGATCTCG TAAAAGGAAACTCAGGGGACTGACAAGCTCAAGTCATGTATGAGGCACGCTCCTGGGACCC CCACCCCTCCTGCCATAGGAAGGACAGCTTTGGGCAAAGGGAAGGAGTTTGAATCAGG GTTGGCCCATACAAATTGGGTGAGGGGTCTCAAGTACAAATACTTATCTGAGGCTCCT GAACAGGCCAAAAATTGGTGAGTCTCAAGTAGGTCTGGGGAAAAAGAGGGAAGGGGCC TGCCCTCGCTCCAGGGGAGCTGGTCGCCGTTTGGCAGGCCTAACAAACCTCTAAGGCACA AACTGGTAGCAGGAAAAAGCTATGTCCTGTACTCCAAATGCTGGGTAAAGGAGCAGCTGGA TGTGCTCAATGGGGCTCTTCTGAAAAGGTGGAGGTAGGAAAAAGGGCAAAAAGAGTAA GCCACTTCAAACGTCCTCCAAAAATCTGAAAGGAGTTACTATGCTAATGCGCTGGGC ATGAATCCAATCAAAACCAATCGTGGTGGGCCCTCATGGCTAAAAAATACTCTGGGTA GGGGCTTGGCTGTTACTGCAGTCACGGACGCTGAGTTATGTACAGAGAGTACGTCAGGGA TAGTGGCCTTAAGAAGAAGAGCCCATGGCCTAACCCAAAGTCTAGCCCGTCCACCAG CACCTNTTGAGTTCACTGGCCACGCACCCGGCTGTTTGATCTTTTGAATGCACCGGTGG CAACAAAGTGCCCTTGGCTCACCCGGTTGAAAGGTAGCCCTTAAGCTGCTGCAAAACGCT GGGGNNTTGGGGCAAAGCCCTTGTGAAACCTGCTGGCCATCCTGNCTGAAAACGGTG CCAAACCT</p>
Restriction Sites:	NotI-NotI
ACCN:	NM_004937
Insert Size:	2550 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:

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_004937.1](#), [NP_004928.1](#)

RefSeq Size: 2611 bp

RefSeq ORF: 1104 bp

Locus ID: 1497

UniProt ID: [O60931](#)

Cytogenetics: 17p13.2

Domains: CTNS

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Lysosome

Gene Summary: This gene encodes a seven-transmembrane domain protein that functions to transport cystine out of lysosomes. Its activity is driven by the H⁺ electrochemical gradient of the lysosomal membrane. Mutations in this gene cause cystinosis, a lysosomal storage disorder. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jul 2009]
Transcript Variant: This variant (2) differs in the 5' UTR, 3' UTR and 3' coding region, compared to variant 1, resulting in an isoform (2) with a distinct and shorter C-terminus, compared to isoform 1. Sequence Note: This RefSeq record was created from transcript and genomic sequence data to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on transcript alignments.