

Product datasheet for **RG202195**

Cystathionase (CTH) (NM_001902) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Cystathionase (CTH) (NM_001902) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Cystathionase
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG202195 representing NM_001902 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCAGGAAAAAGACGCCTCCTCACAAGGTTTCTGCCACACTTCCAACATTTGCCCACGCAGGCGATCC
ATGTGGGCCAGGATCCAGAGCAATGGACCTCCAGGGCTGTAGTGCCCCCATCTCACTGTCCACCACGTT
CAAGCAAGGGGCGCCTGGCCAGCACTCGGGTTTGAATATAGCCGTTCTGGAAATCCCACTAGGAATTGC
CTTGAAAAAGCAGTGGCAGCACTGGATGGGCTAAGTACTGTTTGGCCTTTGCTTCAGGTTTAGCAGCCA
CTGTAACATTACCCATCTTTTAAAAGCAGGAGACCAAATTTTGTATGGATGATGTATGGAGGTAC
AAACAGGTACTTCAGGCAAGTGGCATCTGAATTTGGATTAAGATTTCTTTTGGTATTGTTCCAAAATC
AAATTAAGGATGACATTGAAGGCTGTGCACATATTGTCCATAAGCATGGAGACATTATTTGGTCGTGGA
AGAAGGTGATTGACATTGAAGGCTGTGCACATATTGTCCATAAGCATGGAGACATTATTTGGTCGTGGA
TAACACTTTTATGTCACCATATTTCCAGCGCCCTTTGGCTCTGGGAGCTGATATTCTATGTATTCTGCA
ACAAAATACATGAATGGCCACAGTGTGTTGAATGGCCTGGTGTCTGTTAATTGTGAAAGCCTTCATA
ATAGACTTCGTTTCTTGCAAACTCTCTGGAGCAGTTCATCTCCTATTGATTGTTACCTCTGCAATCG
AGGTCTGAAGACTCTACATGTCCGAATGAAAAAGCATTTCAAAACGGAATGGCAGTTGCCAGTTCCTG
GAATCTAATCCTTGGGTAGAAAAGTTATTTATCCTGGGCTGCCCTCTCATCCACAGCATGAGTTGGTGA
AGCGTCAGTGTACAGTTGTACAGGGATGGTACCTTTTATTAAGGGCACTCTTCAGCATGCTGAGAT
TTTCCTCAAGAACCTAAAGCTATTTACTCTGGCCGAGAGCTTGGGAGGATTCGAAAGCCTTGCTGAGCTT
CCGGCAATCATGACTCATGCATCAGTTCTTAAGAATGACAGAGATGTCCTTGAATTAGTGACACACTGA
TTCGACTTTCTGTGGCTTAGAGGATGAGGAAGACCTACTGGAAGATCTAGATCAAGCTTTGAAGGCAGC
ACACCCTCAAGTGAAGTCACAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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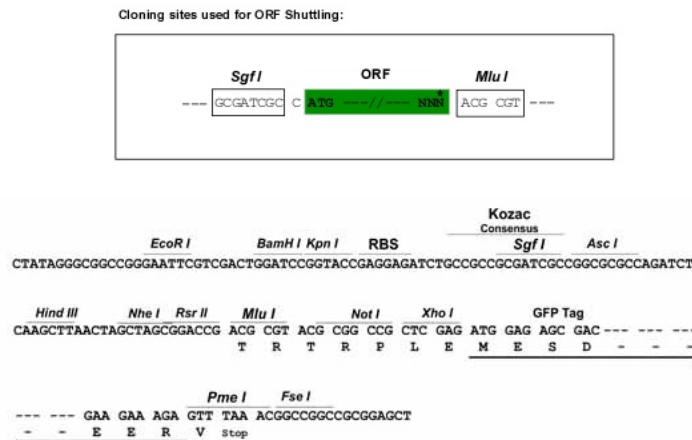
Protein Sequence: >RG202195 representing NM_001902
 Red=Cloning site Green=Tags(s)

MQEKDASSQGFLPHFQHFATQAIHVGQDPEQWTSRAVVPPISLSTTFKQGAPGQHSGFEYSRSGNPTRNC
 LEKAAVALDGAKYCLAFASGLAATVTITHLLKAGDQIICMDDVYGGTNRVFRQVASEFGLKISFVDCSKI
 KLLLEAAITPETKLVWIEPTNPQTQKVIDIEGCAHIVHKHGDIIILVVDNTFMSPYFQRPLALGADISMYS
 TKYMNHSDVVMGLVSVNCESLHNRLRFLQNSLGAVPSPIDCYLCNRGLKTLHVRMEKHFKNMVAQFL
 ESNPWVEKVIYPGLPSHPQHELVKRQCTGCTGMVTFYIKGTLQHAEIFLKNLKLFLAESLGGFESLAEL
 PAIMTHASVLKNDRDVLGISDTLIRLSVGLLEDEEDLLEDLDQALKAAHPPSGSHS

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001902

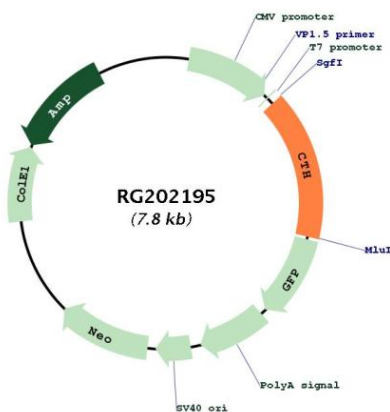
ORF Size: 1215 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:	<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_001902.6
RefSeq Size:	1819 bp
RefSeq ORF:	1218 bp
Locus ID:	1491
UniProt ID:	P32929
Cytogenetics:	1p31.1
Protein Pathways:	Cysteine and methionine metabolism, Glycine, serine and threonine metabolism, Metabolic pathways, Nitrogen metabolism, Selenoamino acid metabolism
Gene Summary:	This gene encodes a cytoplasmic enzyme in the trans-sulfuration pathway that converts cystathione derived from methionine into cysteine. Glutathione synthesis in the liver is dependent upon the availability of cysteine. Mutations in this gene cause cystathioninuria. Alternative splicing of this gene results in three transcript variants encoding different isoforms. [provided by RefSeq, Jun 2010]

Product images:



Circular map for RG202195