

## Product datasheet for RC237902

### GOT2 (NM\_001286220) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GOT2 (NM_001286220) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GOT2
Synonyms:	DEE82; KAT4; KATIV; KYAT4; mitAAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC237902 representing NM_001286220 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGGCCCTGCTGCACTCCGGCCGCGTCTCCCCGGGATCGCCGCCCTTCCACCCGGGCTCGCCCGG  
CGGCCTCTGCCAGAGCCAGCTCCTGGTGGACCCATGTGGAATGGGACCTCCAGATCCCATTCTGGGAGT  
CACTGAAGCCTTAAAGAGGGACACCAATAGCAAAAAGTGAATCTGGGAGTTGGTGCCTACCGGATGAT  
AATGGAAGCCTTACGTTCTGCCTAGCGTCCGCAAGTTTGTCACTGTGCAGACCATTCTGGAAGTGGAG  
CCTTAAGGATCGGAGCCAGTTTTCTGCAAAGATTTTTAAGTTCAGCCGAGATGTCTTTCTGCCAAACC  
AACCTGGGGAAACCACACACCCATCTTCAGGGATGCTGGCATGCAGCTACAAGTTATCGGTATTATGAC  
CCCAAGACTTGCGGTTTTGACTTACAGGCGCTGTGGAGGATATTTCAAAAATACCAGAGCAGAGTGTTT  
TTCTTCTGCATGCCTGCGCCACAATCCCACGGGAGTGGACCCGCGTCCGGAACAGTGAAGGAAATAGC  
AACAGTGGTGAAGAAAAGGAATCTTTTGCCTTTTGCATGGCCTACCAAGGCTTTGCCAGTGGTGTAT  
GGTATAAGGATGCCTGGGCTGTGCGCCACTTCATCGAACAGGGCATTATGTTTGCCTCTGCCAATCAT  
ATGCCAAGAACATGGGCTTATATGGTGAAGCGTGTAGGAGCCTTCACTATGGTCTGCAAAGATGCGGATGA  
AGCCAAAAGGGTAGAGTCACAGTTGAAGATCTTGATCCGTCATGTATCCAACCCTCCCCTCAATGGG  
GCCCGGATTGCTGCTGCCATTCTGAACACCCAGATTTGCGAAAACAATGGCTGCAAGAAGTGAAGTCA  
TGGCTGACCGCATATTGGCATGCGGACTCAACTGGTCTCCAACCTCAAGAAGGAGGTTCCACCCACAA  
TTGGCAACACATCACCGACCAAATTGGCATGTTCTGTTTACAGGGCTAAAGCCTGAACAGTGGAGCGG  
CTGATCAAGGAGTTCTCCATCTACATGACAAAAGATGGCCGCATCTCTGTGGCAGGGGTACCTCCAGCA  
ACGTGGGCTACCTTGCCCATGCCATTACCAGGTCACCAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



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**Protein Sequence:** >RC237902 representing NM\_001286220  
Red=Cloning site Green=Tags(s)

MALLHSGRVLPGIAAAFHPGLAAAASARASSWTHVEMGPPDPIILGVTEAFKRDNTNSKMMNLGVGAYRDD  
 NGKPYVLPVSRKFVTVQTIISGTGALRIGASFLQRFKFSRDVFLPKPTWGNHTPIFRDAGMQLQGYYDD  
 PKTCGFDFGTGAVEDISKIPEQSVLLHACAHNPTGVDPRPEQWKEIATVVKRNLFAFFDMAYQGFASGD  
 GDKDAWAVRHFIEQGINVCLCQSYAKNMGLYGERVGFATMVCKDADEAKRVESQLKILIRPMYSNPPLNG  
 ARIAAAAILNTPDLRKQWLQEVKVMADRIIGMRTQLVSNLKKEGSTHNWQHITDQIGMFCFTGLKPEQVER  
 LIKEFSIYMTKDGRI SVAGVTSSNVGYLAHAIHQVTK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/ja3388\\_b06.zip](https://cdn.origene.com/chromatograms/ja3388_b06.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_001286220

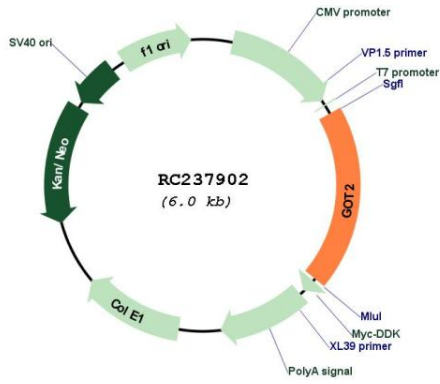
**ORF Size:** 1161 bp

**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](mailto: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](#)

<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001286220.2</a>
<b>RefSeq Size:</b>	2359 bp
<b>RefSeq ORF:</b>	1164 bp
<b>Locus ID:</b>	2806
<b>UniProt ID:</b>	<a href="#">P00505</a>
<b>Cytogenetics:</b>	16q21
<b>Protein Families:</b>	Stem cell - Pluripotency
<b>Protein Pathways:</b>	Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Cysteine and methionine metabolism, Metabolic pathways, Phenylalanine, tyrosine and tryptophan biosynthesis, Phenylalanine metabolism, Tyrosine metabolism
<b>MW:</b>	43 kDa
<b>Gene Summary:</b>	Glutamic-oxaloacetic transaminase is a pyridoxal phosphate-dependent enzyme which exists in cytoplasmic and inner-membrane mitochondrial forms, GOT1 and GOT2, respectively. GOT plays a role in amino acid metabolism and the urea and tricarboxylic acid cycles. The two enzymes are homodimeric and show close homology. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2013]

Product images:



Circular map for RC237902