

## Product datasheet for **RG237902**

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

#### Product data:

Product Type:	Expression Plasmids
Product Name:	GOT2 (NM_001286220) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	GOT2
Synonyms:	DEE82; KAT4; KATIV; KYAT4; mitAAT
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG237902 representing NM_001286220. Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTT TAGTGAACCGTCAGAATTTTGT AATACGACTCACTATAGGGCGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCC CGCATCGCC
ATGGCCCTGCTGCACTCCGGCCGCGTCCTCCCGGGATCGCCGCCGCTTCCACCCGGGCCCTCGCCGCC
GCGGCCTCTGCCAGAGCCAGCTCCTGGTGGACCCATGTGGAAATGGGACCTCCAGATCCCATTCTGGGA
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GATAATGGAAAGCCTTACGTTCTGCCTAGCGTCCGCAAGTTTGTCACTGTGCAGACCATTCTGAACT
GGAGCCTAAGGATCGGAGCCAGTTTTCTGCAAAGATTTTTAAGTTAGCCGAGATGTCTTTCTGCC
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TATGACCCCAAGACTTGC GGTTTTGACTTCACAGGCGCTGTGGAGATATTTCAAAAATACCAGAGCAG
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GAAATAGCAACAGTGGTGAAGAAAAGGAATCTCTTTGCGTTCTTTGACATGGCCTACCAAGGCTTTGCC
AGTGGTGATGGTGATAAGGATGCCTGGGCTGTGCGCCACTTCAATCGAACAGGGCATTAAATGTTTGCCTC
TGCCAATCATATGCCAAGAACATGGGCTTATATGGTGAGCGTGTAGGAGCCTTCACTATGGTCTGCAAA
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CCCCTCAATGGGGCCCGGATTGCTGCTGCCATTCTGAACACCCAGATTTGCGAAAACAATGGCTGCAA
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GGTTCACCCACAATTGGCAACACATCACCGACCAAAATTGGCATGTTCTGTTTCACAGGGCTAAAGCCT
GAACAGGTGGAGCGGCTGATCAAGGAGTTCTCCATCTACATGACAAAAGATGGCCGCATCTCTGTGGCA
GGGGTCACTCCAGAACGTTGGGCTACCTTGCCCATGCCATTACCAGGTCACCAAG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```



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**Protein Sequence:** >Peptide sequence encoded by RG237902  
 Blue=ORF Red=Cloning site Green=Tag(s)

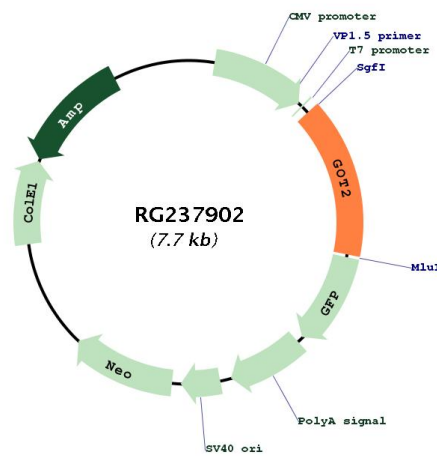
MALLHSGRVLPGIAAAFHPGLAAAASARASSWTHVEMGPPDPI LGVTEAFKRDTNSKKMNLGVGAYRD  
 DNGKPYVLP SVRKFVTVQTI SGTGALRIGASFLQRFFKFSRDVFLPKPTWGNHTPIFRDAGMQLQGYRY  
 YDPKTCGFDFGTAVEDI SKIPEQSVLL LHACAHNPTGVDPRPEQWKEIATVVKRNLF AAFDMAYQGFA  
 SGDGDKDAWAVRHFI EQGINVCLCQSYAKNMGL YGERVGAF TMCKDADEAKRVESQLKILIRPMSNP  
 PLNGARIAAAAILNTPDLRKQWLQEVKVMADRIIGMRTQLVSNLKKEGSTHNWQHITDQIGMFCFTGLKP  
 EQVERLIKEFSIYMTKDGRISVAGVTSSNVGYLAHAIHQVTK  
 TRTRPLEMESDEGLPAMEIECRITGTLNGVEFELVGGEGTPEQGRMTNKMKSTKGALTFSPYLLSHV  
 MGYGFYHFGTYP SGYENPFLHAINNGGYNTRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPED  
 SVIFTDKIIRS NATVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVD SHMHFKSAIHPSILQNGGPMFA  
 FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**Plasmid Map:**



<b>ACCN:</b>	NM_001286220
<b>ORF Size:</b>	1161 bp
<b>OTI Disclaimer:</b>	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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> 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. <a href="#">More info</a>
<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>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]