

## Product datasheet for **RC201826**

### **GOT2 (NM\_002080) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	GOT2 (NM_002080) 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)



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**ORF Nucleotide Sequence:**

>RC201826 representing NM\_002080  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGCCCTGCTGCACTCCGGCCGCTCCTCCCGGGATCGCCGCCGCTTCCACCCGGCCCTCGCCGCC  
 CGGCCTCTGCCAGAGCCAGCTCCTGGTGGACCCATGTGGAAATGGGACCTCCAGATCCCATTCTGGGAGT  
 CACTGAAGCCTTTAAGAGGGACACCAATAGCAAAAAGATGAATCTGGGAGTTGGTGCCTACCGGGATGAT  
 AATGGAAAGCCTTACGTTCTGCCTAGCGTCCGCAAGGCAGAGGCCAGATTGCCGCAAAAAATTTGGACA  
 AGGAATACCTGCCATTGGGGGACTGGCTGAATTTTGAAGGCATCTGCAGAAGTACCCCTGGGTGAGAA  
 CAGCGAAGTCTTGAAGAGTGGCCGGTTTGTCACTGTGCAGACCATTTCTGGAAGTGGAGCCTTAAGGATC  
 GGAGCCAGTTTTCTGCAAAGATTTTTAAGTTCAAGCCGAGATGTCTTTCTGCCAAACCAACCTGGGGAA  
 ACCACACACCCATCTTCAGGGATGCTGGCATGCAGCTACAAGTTATCGGTATTATGACCCCAAGACTTG  
 CGTTTTGACTTACAGGCGCTGTGGAGGATATTTCAAAAATACCAGAGCAGAGTGTCTTCTTCTGCAT  
 GCCTGCGCCACAATCCCACGGGAGTGGACCCGGTCCGGAACAGTGGAAGGAAATAGCAACAGTGGTGA  
 AGAAAAGGAATCTCTTTGCGTTCTTTGACATGGCCTACCAAGGCTTTGCCAGTGGTATGGTATAGGA  
 TGCTGGGCTGTGCGCCACTTTCGAACAGGGCATTAAATGTTTGCCTCTGCCAATCATATGCCAAGAAC  
 ATGGGCTTATATGGTGAGCGTGTAGGAGCCTTCACTATGGTCTGCAAAGATGCGGATGAAGCCAAAAGGG  
 TAGAGTCACAGTTGAAGATCTTGATCCGTCCTATGATTTCAACCCCTCCCTCAATGGGGCCCGGATTGC  
 TGCTGCCATTCTGAACACCCAGATTTGCGAAAACAATGGCTGCAAGAAGTGAAGTCATGGCTGACCGC  
 ATCATTGGCATGCGGACTCAACTGGTCTCAACCTCAAGAAGGAGGTTCCACCCACAATTGGCAACACA  
 TCACCGACCAAAATGGCATGTTCTGTTTACAGGGCTAAAGCCTGAACAGGTGGAGCGGCTGATCAAGGA  
 GTTCTCCATCTACATGACAAAAGATGGCCGATCTCTGTGGCAGGGTCCACCTCCAGCAACGTGGGCTAC  
 CTTGCCCATGCCATTACCAGGTCACCAAG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC201826 representing NM\_002080  
 Red=Cloning site Green=Tags(s)

MALLHSGRVLPGIAAAFHPGLAAAASARASSWTHVEMGPPDPIILGVTEAFKRDTNSKMMNLGVGAYRDD  
 NGKPYVLPVSRKAEAQIAAKNLKEYLPIGGLAEFCKASAELALGENSEVLKSGRFVTVQTSIGTGALRI  
 GASFLQRFFKFSRDVFLPKPTWGNHTPIFRDAGMQLQGYRYDPKTCGFDFTGAVEDISKIPEQSVLLLH  
 ACAHNPTGVDPRPEQWKEIATVVKRNLF AFFDMAYQGFASGDGDKDAWAVRHFIEQGINVCLCQSYAKN  
 MGLYGERVGAFTMVCKDADEAKRVESQLKILIRPMYSNPPLNGARIAAAIILNTPDLRKQWLQEVKVMADR  
 IIGMRTQLVSNLKKEGSTHNWQHITDQIGMFCFTGLKPEQVERLIKEFSIYMTKDGRISVAGVTSSNVGY  
 LAHAHQVTK

**TR**TRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk8120\\_h11.zip](https://cdn.origene.com/chromatograms/mk8120_h11.zip)

**Restriction Sites:**

Sgfl-Mlul

Cloning Scheme:



ACCN: NM\_002080

ORF Size: 1290 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](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

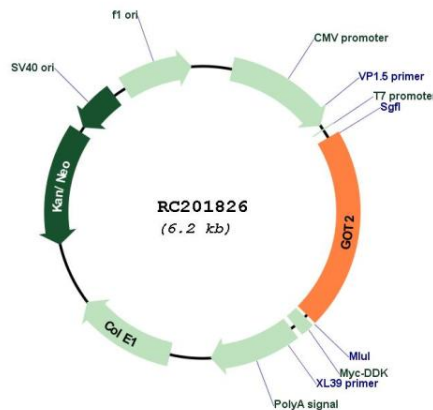
Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- 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\\_002080.4](#)

RefSeq Size:	2488 bp
RefSeq ORF:	1293 bp
Locus ID:	2806
UniProt ID:	<a href="#">P00505</a>
Cytogenetics:	16q21
Domains:	aminotran_1_2
Protein Families:	Stem cell - Pluripotency
Protein Pathways:	Alanine, aspartate and glutamate metabolism, Arginine and proline metabolism, Cysteine and methionine metabolism, Metabolic pathways, Phenylalanine, tyrosine and tryptophan biosynthesis, Phenylalanine metabolism, Tyrosine metabolism
MW:	48 kDa
Gene Summary:	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 RC201826