

Product datasheet for SC127269

GOT2 (NM_002080) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GOT2 (NM_002080) Human Untagged Clone
Tag:	Tag Free
Symbol:	GOT2
Synonyms:	DEE82; KAT4; KATIV; KYAT4; mitAAT
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)
Fully Sequenced ORF:	>OriGene ORF within SC127269 sequence for NM_002080 edited (data generated by NextGen Sequencing)

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ATGGCCCTGCTGCACTCCGGCCGCTCCTCCCGGGATCGCCCGCCTTCCACCCGGG
CTCGCCGCGCGCCTCTGCCAGAGCCAGCTCCTGGTGGACCCATGTGGAATGGACCT
CCAGATCCATTCTGGGAGTCACTGAAGCCTTTAAGAGGGACACCAATAGCAAAAAGATG
AATCTGGGAGTTGGTGCCTACCGGGATGATAACGGAAAGCCTTACGTGCTGCCTAGCGTC
CGCAAGGCAGAGGCCAGATTGCCGCAAAAAATTTGGACAAGGAATACCTGCCATTGGG
GGACTGGCTGAATTTTGAAGGCATCTGCAGAAGTCCCTGGGTGAGAAGCAGCGAAGTC
TTGAAGAGTGGCCGTTTGTCACTGTGCAGACCTTCTGGAAGTGGAGCCTTAAGGATC
GGAGCCAGTTTTCTGCAAGATTTTTAAGTTCAGCCGAGATGTCTTTTCCCAACCA
ACCTGGGAAACACACCCATCTTCAGGGATGCTGGCATGCAGCTACAAGTTATCGG
TATTATGACCCCAAGACTTGCAGTTTTGACTTCACAGGCCTGTGGAGGATATTTCAAAA
ATACCAGAGCAGAGTGTCTTCTTCTGCATGCCTGCGCCACAATCCACGGGAGTGGAC
CCGCGTCCGGAACAGTGAAGGAAATAGCAACAGTGGTGAAGAAAAGGAATCTCTTTGCG
TTCTTTGACATGGCCTACCAAGGCTTTGCCAGTGGTGTGGTGAAGGATGCCTGGGCT
GTGCGCCACTTCATCGAACAGGGCATTAAATGTTTGTCTCTGCCAATCATATGCCAAGAAC
ATGGGCTTATATGGTGAAGCCTTACTATGGTCTGCAAAGATGCGGATGAA
GCCAAAAGGGTAGAGTCAAGTGAAGATCTTGATCCGTCCTCATGATTTCAACCCTCCC
CTCAATGGGCGCGATTGCTGCTGCCATTCTGAACACCCAGATTTGCGAAAACAATGG
CTGCAAGAAGTGAAGGCATGGCTGACCGCATCATTGGCATGCGGACTCAACTGGTCTCC
AACCTCAAGAAGGAGGGTTCCACCCACAATTGGCAACACATCACCGACCAAAATTGGCATG
TTCTGTTTACAGGGCTAAAGCCTGAACAGGTGGAGCGGCTGATCAAGGAGTTCTCCATC
TACATGACAAAAGATGGCCGCATCTCTGTGGCAGGGGTACCTCCAGCAACGTGGGCTAC
CTTGCCCATGCCATTACCAGGTCACCAAGTAA

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Clone variation with respect to NM_002080.2
213 t=>c;228 t=>g;816 c=>t;1037 t=>g



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5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002080 unedited
 GAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGTTCCTGTGTGTGTGTC
 CGCTCGCCCTCTGCTCCGTCCTGCGGCTGCCACTGCCCTCTACGGTCCACCATGGCCC
 TGCTGCACTCCGGCCGCGTCTCCCCGGGATCGCCGCGCCTCCACCCGGGCTCGCCG
 CCGCGGCTCTGCCAGAGCCAGCTCCTGGTGGACCCATGTGGAATGGGACCTCCAGATC
 CCATTCTGGGAGTCACTGAAGCCTTTAAGAGGGACACCAATAGCAAAAAGATGAATCTGG
 GAGTTGGTGCCTACCGGATGATAACGGAAAGCCTTACGTGCTGCCTAGCGTCCGCAAGG
 CAGAGGCCAGATTGCCGCAAAAAATTTGGACAAGGAATACCTGCCATTGGGGGACTGG
 CTGAATTTTGCAAGGCATCTGCAGAAGTACCCCTGGGTGAGAACAGCGAAGTCTTGAAGA
 GTGGCCGGTTTGTCACTGTGCAGACATTTCTGGAAGTGGAGCCTTAAGGATCGGAGCCA
 GTTTTCTGCAAAGATTTTTAAGTTCAGCCGAGATGTCTTTCTGCCAAACCAACCTGGG
 GAAACCACACACCCATCTTCAGGGATGCTGGCATGCAGCTACAAGTTATCGGTATTATG
 ACCCCAAGACTTGCAGTTTTGACTTCACAGGCGCTGTGGAAGATATTTCAAATACCAGA
 GCAGAGTGTCTCTTCTGCATGCCTGCGCCACAATCCCAGGGAGTGGACCCGCGTCCG
 GAAAGTGGGAGGAAATACCACCAGCGTGAAGAAAAGGAATCTCTTGCCTNCTTTGACTT
 GCCCTACACAGCCTTGCCAGTGTGGATGGTATAGATGCCTGGGCTGGGCCCACTCAT
 CG

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002080 unedited
 GGCCGCAATCTAGNATCGAGTTTTTTTTTTTTTTTTTTTTGGGTCTACAGTAATTTTATTGT
 AACAGAGAAACCAGGCCGAATAAGTCTACATGGTTAGAGCAGATGGTGGTTCTTTCCAG
 TGGGTGAAGCCTGAACCCAGCTAGCAGCACGCAAAGCCTAGAATATCCTCTTTCTGGTA
 CCACCCTGCGCCGCTGGACTCACAGTGTGAGATGAGAGGCTGCACACCACATTCAACAAA
 GGGAGGAGGTCCAACCGGCAGAGACAACATCCCAACTGGAGAACTTGCATATCATTG
 AAGAGGATGCCGAGATAAAGTACAGTTTCTACTCTCCACTATTCTTTGCTGAAAAGGGT
 GAGGGTACGGCATCAGCAGAAAATTATGTTCTTCTTAAATAAATCTCGATAGGATG
 GAGTTGATGGTCAATCAAGCAGTAGAATGGGATGAAAATCTGCAATAGTTAAAAAATCTT
 TGCGTGTAAAGAAAAGAACGGCAATGACAAGGGAGAAAAGAGAGCCTTCTTTTTTCTTA
 AATAAGACAGGAAACTGCATTATTTCCCTTGGTGGAGTGGCAGCAGCCTCATTGGTTTTT
 ATAAAACATCATTCTGCAGTGCAGCCTGTTGATAAGGGTGTCCAAGATGGGAGGACAG
 ACACGAGGCCGACTACTCATGACAGAAGTGGCCTTCTCTCAAAGCCTTAACGTGTGCT
 GTTTCTCACGAGAACCTGACACTTCAGNTAAAGCTTCTGAATATTGCAATGGCTATTGA
 CAGGTTTTTGTGCGATGACTTCTGCCATGTAAGTCTTGAGAAAAGTTGAGAAAAAGGACGC
 GAGAGTTCGGTTATTTCCAACGCACCCTGATGCCTTGCCTGGGACTACAGGTCTTTTGA
 AACATCAATGTGAAGGTAACCTGGGCTGAAGAAGATCATACCCCATCACCTTT

Restriction Sites:

NotI-NotI

ACCN:

NM_002080

Insert Size:

2410 bp

OTI Disclaimer:	<p>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.</p> <p>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</p>
Components:	<p>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).</p>
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_002080.2 , NP_002071.2
RefSeq Size:	2473 bp
RefSeq ORF:	1293 bp
Locus ID:	2806
UniProt ID:	P00505
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
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) represents the longer transcript and encodes the longer isoform (1).</p>