

Product datasheet for MR206497

Got1 (NM_010324) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Got1 (NM_010324) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Got1
Synonyms:	A1789014; cAspAT; cCAT; Got-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR206497 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCGCCTCCATCAGTCTTTGCCAGGTTCCGCAAGCTCCTCCGGTCTGGTCTTTAAGCTCACTGCGG
ACTTCCGGGATGATCCAGATCCCCGCAAGGTTAACCTCGCGTGGGAGCGTACCGCACAGATGAATCTCA
GCCCTGGGTTTTGCCAGTAGGAGGAGTGAACAGAAGATTGCTAATGACAACAGCCTCAACCACGAG
TACCTGCCATCCTGGGCTGGCAGAGTCCGGAGCTGTGCTTTCGCCTAGTCTTGGGACAACAGCC
CGGCTATCAGGGAGAATCGGGTTGGAGGGTGCAGTCTTTGGGAGGACAGGCGCTTTCGGATTGGAGC
TGACTTCTTAGGGCGATGGTACAATGGTACAGATAACAAGAACACACCAATCTACGTATCATCGCCAACC
TGGGAGAACCATAATGCTGTGTTTTCTGCCCGGTTTTAAGGACATTCCGCCCTATTGCTACTGGGATG
CGGAGAAGAGAGGACTGGACCTCCAGGGTTTCTGAATGATCTGGAGAATGCCCCGAGTTCTCCATCTT
TGTCTCCATGCCTGTGCGCACAAACCAAGGGACCCGACTCCAGAGCAGTGAAGCAGATCGCT
GCTGTCATGCAGCGCGTTTTCTGTTCCCTTCTTGACTCAGCCTATCAGGGCTTTGCATCTGGAGACC
TAGAGAAAGATGCGTGGGCTATTCGCTATTTGTGTCTGAAGGCTTCGAGCTCTTCTGTGCCAGTCCTT
CTCCAAGAACTTCGGGCTCTACAATGAGAGAGTGGGAATCTGACCGTGGTCGAAAAGAGTCTGACAGC
CTCGGATTGTGGCCGCCACCCTCTGACCCGGAGCTCTTAAGGAGTGGAAAGGTAACGTGAAGACAAT
GGCTGACCGGATTCTGACCATGAGATCCGAACCTCAGGGCAAGACTAGAAGCTCTCAAGACCCCGGACT
TGGTCTCACATCACTGAGCAGATTGGAATGTTCAAGTTTACCAGGCTTGAACCCCAAGCAGGTCGAGTATT
TGGTCAACGAGAAGCATATCTATCTCTGCGGAGTGGTCGGATCAACATGTGCGGCTTGACCACCAAGAA
CCTAGATTACGTCGCTACCTCCATCCATGAAGCCGTCACCAAAATCCAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >MR206497 protein sequence
 Red=Cloning site Green=Tags(s)

MAPPSVFAQVPQAPPVLVFKLTADFRDDPDRKVNLVGVGAYRTDESQPWVLPVVRKVEQKIANDNSLNHE
 YLPILGLAEFRSCASRLVLGDNSPAIRENRVGGVQSLGGTGALRIGADFLGRWYNGTDNKNTPPIYVSSPT
 WENHNNAVFSAAAGFKDIRPYCYWDAEKRGDLQGFNLNDLENAPEFSIFVLHACAHNPTGTDPTPEQWKQIA
 AVMQRRFLFPFFDSAYQGFASGDLEKDAWAIIRYFVSEGFELFCAQSF SKNFGLYNERVGNLTVVGKESDS
 VLRVLSQMEKIVRITWSNPPAQGARIVAATLSDPEL FKEWKGNVKTMDRILTMRSELRARLEALKTPGT
 WSHITEQIGMFSFTGLNPKQVEYLVNEKHIIYLLPSGRINMCGLTTKNLDYVATSIHEAVTKIQ

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_010324

ORF Size: 1242 bp

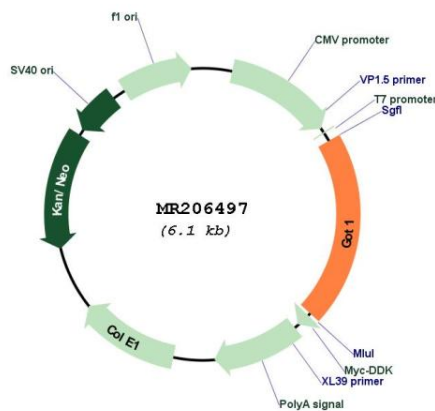
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:	<u>NM_010324.1</u> , <u>NM_010324.2</u> , <u>NP_034454.2</u>
RefSeq Size:	2065 bp
RefSeq ORF:	1242 bp
Locus ID:	14718
UniProt ID:	<u>P05201</u>
Cytogenetics:	19 36.67 cM
MW:	46.2 kDa
Gene Summary:	Biosynthesis of L-glutamate from L-aspartate or L-cysteine. Important regulator of levels of glutamate, the major excitatory neurotransmitter of the vertebrate central nervous system. Acts as a scavenger of glutamate in brain neuroprotection. The aspartate aminotransferase activity is involved in hepatic glucose synthesis during development and in adipocyte glyceroneogenesis. Using L-cysteine as substrate, regulates levels of mercaptopyruvate, an important source of hydrogen sulfide. Mercaptopyruvate is converted into H(2)S via the action of 3-mercaptopyruvate sulfurtransferase (3MST). Hydrogen sulfide is an important synaptic modulator and neuroprotectant in the brain (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR206497