

Product datasheet for **RC200528**

GAMT (NM_000156) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GAMT (NM_000156) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GAMT
Synonyms:	CCDS2; HEL-S-20; PIG2; TP53I2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin
ORF Nucleotide Sequence:	>RC200528 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGC**C

ATGAGCGCCCCAGCGCACCCCATCTTCGCGCCGGCGAGAAGTGCAGCCCCGCTGGGGGGCGGGC
CCGCGGCTACGACGCAGCGGACACGCACCTGCGCATCCTGGCAAGCCGGTGATGGAGCGCTGGGAGAC
CCCCTATATGCACGCGCTGGCCCGCCGCTCCTCAAAGGGGGCCGGTCTGGAGGTGGCTTTGGC
ATGGCCATCGCAGCGTCAAAGGTGCAGGAGGCGCCATTGATGAGCATTGGATCATCGAGTGCAATGACG
GGTCTTCCAGCGGCTCCGGGACTGGGCCCCACGGCAGACACACAAGGTATCCCCTTGAAGGCCTGTG
GGAGGATGTGGCACCCACCCTGCCTGACGGTCACTTTGATGGGATCCTGTACGACACGTACCCACTCTCG
GAGGAGACCTGGCACACACACAGTTCAACTTCATCAAGAACCACGCCTTTCGCCTGCTGAAGCCGGGG
GCGTCCTCACCTACTGCAACCTCACCTCCTGGGGGAGCTGATGAAGTCCAAGTACTCAGACATCACCAT
CATGTTTGAGGAGACGCAGGTGCCCGCGCTGCTGGAGCCGGCTTCCGGAGGGAGAACATCCGTACGGAG
GTGATGGCGCTGGTCCCACCGCCGACTGCCGCTACTACGCTTCCCACAGATGATCACGCCCTGGTGA
CCAAAGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RC200528 protein sequence
 Red=Cloning site Green=Tags(s)

MSAPSATPIFAPGENCSPA WGAAPAA YDAADTHLRILGKPVMERWETPYMHALAAAASSKGGRVLEVFG
 MAIAASKVQEAPIDEHWIIECNDGVFQRLRDWAPRQTHKVIPLKGLWEDVAPTL PDGHFDGILYDTPLS
 EETWHTHQFNFIKNHAFRL LKPGGVLTYCNLT SWGELMKS KYSYSDITIMFEETQVPALLEAGFRRENIRTE
 VMALVPPADCRYYAFPQMITPLVTKG

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

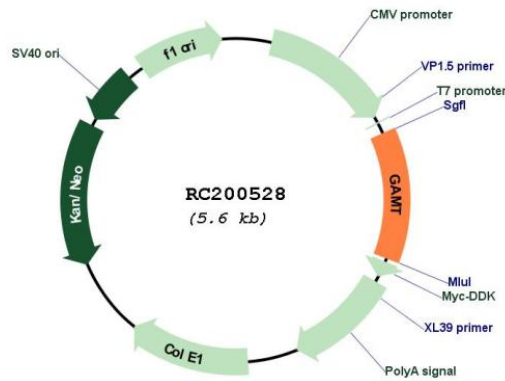
Chromatograms: https://cdn.origene.com/chromatograms/mk6417_b12.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

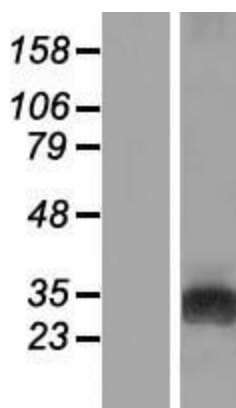


Plasmid Map:

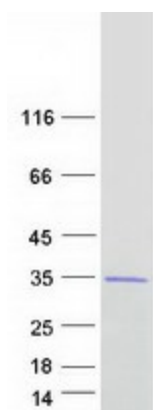


ACCN: NM_000156

ORF Size:	708 bp
OTI Disclaimer:	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.
RefSeq:	NM_000156.6
RefSeq Size:	1138 bp
RefSeq ORF:	711 bp
Locus ID:	2593
UniProt ID:	Q14353 , V9HWB2
Protein Families:	Druggable Genome
Protein Pathways:	Arginine and proline metabolism, Glycine, serine and threonine metabolism, Metabolic pathways
MW:	26.3 kDa
Gene Summary:	The protein encoded by this gene is a methyltransferase that converts guanidoacetate to creatine, using S-adenosylmethionine as the methyl donor. Defects in this gene have been implicated in neurologic syndromes and muscular hypotonia, probably due to creatine deficiency and accumulation of guanidinoacetate in the brain of affected individuals. Two transcript variants encoding different isoforms have been described for this gene. Pseudogenes of this gene are found on chromosomes 2 and 13. [provided by RefSeq, Feb 2012]

Product images:


Western blot validation of overexpression lysate (Cat# [LY408469]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with [RC216741] using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified GAMT protein (Cat# [TP300528]). The protein was produced from HEK293T cells transfected with GAMT cDNA clone (Cat# RC200528) using MegaTran 2.0 (Cat# [TT210002]).