

Product datasheet for RC200474L2

GATM (NM_001482) Human Tagged Lenti ORF Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | GATM (NM_001482) Human Tagged Lenti ORF Clone |
| Tag: | mGFP |
| Symbol: | GATM |
| Synonyms: | AGAT; AT; CCDS3; FRTS1 |
| Mammalian Cell Selection: | None |
| Vector: | pLenti-C-mGFP (PS100071) |
| E. coli Selection: | Chloramphenicol (34 ug/mL) |
| ORF Nucleotide Sequence: | The ORF insert of this clone is exactly the same as(RC200474). |
| Restriction Sites: | SgfI-MluI |
| Cloning Scheme: | |

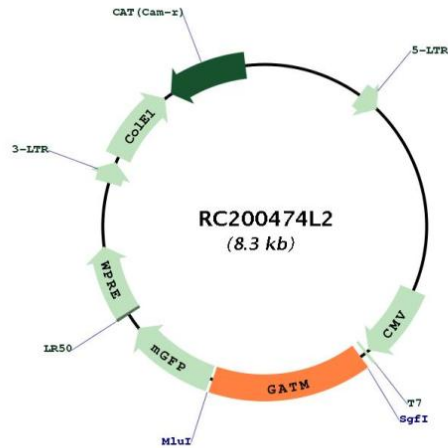
Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF.



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Plasmid Map:


ACCN: NM_001482

ORF Size: 1269 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.

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_001482.2](#)

RefSeq Size: 2602 bp

RefSeq ORF: 1272 bp

Locus ID: 2628
UniProt ID: [P50440](#)
Cytogenetics: 15q21.1
Domains: Amidinotransf
Protein Families: Druggable Genome
Protein Pathways: Arginine and proline metabolism, Glycine, serine and threonine metabolism, Metabolic pathways

MW: 48.5 kDa

Gene Summary: This gene encodes a mitochondrial enzyme that belongs to the amidinotransferase family. This enzyme is involved in creatine biosynthesis, whereby it catalyzes the transfer of a guanido group from L-arginine to glycine, resulting in guanidinoacetic acid, the immediate precursor of creatine. Mutations in this gene cause arginine:glycine amidinotransferase deficiency, an inborn error of creatine synthesis characterized by cognitive disability, language impairment, and behavioral disorders. [provided by RefSeq, Jul 2008]