

### Product datasheet for RC204267L1

#### OriGene Technologies, Inc.

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## GMP Synthase (GMPS) (NM\_003875) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

**Product Name:** GMP Synthase (GMPS) (NM\_003875) Human Tagged Lenti ORF Clone

Tag: Myc-DDK

Symbol: GMP Synthase

Synonyms: GATD7

Mammalian Cell None

Selection:

Vector:pLenti-C-Myc-DDK (PS100064)E. coli Selection:Chloramphenicol (34 ug/mL)

**ORF Nucleotide** The ORF insert of this clone is exactly the same as(RC204267).

Sequence:

**Restriction Sites:** Sgfl-Mlul

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF.

**ACCN:** NM\_003875

ORF Size: 2079 bp



ORÏGENE

**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 003875.2

 RefSeq Size:
 2457 bp

 RefSeq ORF:
 2082 bp

 Locus ID:
 8833

 UniProt ID:
 P49915

Cytogenetics:

**Domains:** GATase, GMP synt C

3q25.31

**Protein Families:** Stem cell - Pluripotency

**Protein Pathways:** Drug metabolism - other enzymes, Metabolic pathways, Purine metabolism

**MW:** 76.7 kDa

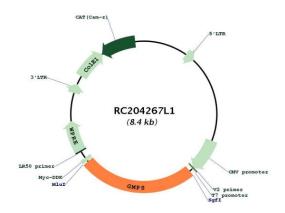
**Gene Summary:** In the de novo synthesis of purine nucleotides, IMP is the branch point metabolite at which

point the pathway diverges to the synthesis of either guanine or adenine nucleotides. In the guanine nucleotide pathway, there are 2 enzymes involved in converting IMP to GMP, namely

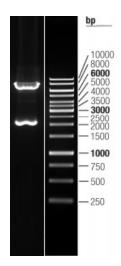
IMP dehydrogenase (IMPD1), which catalyzes the oxidation of IMP to XMP, and GMP synthetase, which catalyzes the amination of XMP to GMP. [provided by RefSeq, Jul 2008]



# **Product images:**



Circular map for RC204267L1



Double digestion of RC204267L1 using Sgfl-Mlul