

Product datasheet for RC226553

GART (NM_001136005) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GART (NM_001136005) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GART
Synonyms:	AIRS; GARS; GARTF; PAIS; PGFT; PRGS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC226553 representing NM_001136005 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCAGCCCGAGTACTTATAATTGGCAGTGGAGGAAGGGAACATACGCTGGCCTGGAACTTGCACAGT
CTCATCATGTCAAACAAGTGTGGTTGCCCCAGGAAACGCAGGCACTGCCTGCTCTGAAAAGATTTCAAA
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GGTGTAGAGATAACAGGGTTTCTGAGGCTCAAGCTCTAGGACTGGAGGTGTTCCATGCAGGCACTGCC
TCAAAAATGGCAAAGTAGTAACCTCATGGGGTAGAGTTCTTGCAGTCACAGCCATCCGGGAAAATCTCAT
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TCTGGAACAGATGGCGTTGGAAC TAAACTAAAGATTGCCAGCTATGCAATAAACATGATACCATTGGTC
 AAGATTTGGTAGCAATGTGTGTTAATGATATTCTGGCACAAGGAGCAGAGCCCCTTCTTCTTCTTGATTA
 CTTTTCTGTGGAAAACCTGACCTCAGTGAAC TGAAGCTGTTGTTGCTGGAATTGCTAAAGCTTGTGGA
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 TCTGTTGGGTTAAAGAGGAA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC226553 representing NM_001136005
 Red=Cloning site Green=Tags(s)

MAARVLIIGSGGREHTLAWKLAQSHHVQVLVAPGNAGTACSEKISNTAISISDHTALAQFCKEKKIEFV
 VVGPEAPLAAGIVGNLRSAGVQCFGPTAEAAQLESSKRFAKEFMDRHPGIPTAQWKAFTKPEEACSFILSA
 DFPALVVKASGLAAGKGVIVAKSKEEACKAVQEIMQEAFGAAGETIVIEELLDGEEVSCLCFDTGKTVA
 PMPPAQDHRKRLLEGDGGPNTGGMGAYCPAPQVSNLLLLIKDVTQLQRTVDGMQEQEGTPYTGILYAGIMLT
 KNGPKVLEFNCRFGDPEQCQVILPLLKSDLYEVIQSTLDGLLCTSLPVWLENHTAL TVVMASKGYPGDYTK
 GVEITGFPEAQALGLEVFHAGTALKNGKVVTHGGRVLA VTAIRENLISALEEAKKGLAAIKFEGAIYRKD
 VGFRAIAFLQQPRSLTYKESGVDIAAGNMLVKKIQPLAKATSRSGCKVDLGGFAGLFDLKAAGFKDPLLA
 SGTGVTGKTKLIAQLCNKHDTIGQDLVAMCVNDILAQGAEPLFFLDYFSCGKLDLSVTEAVVAGIAKACG
 KAGCALLGGETAEMPDMYPPGEYDLAGFAVGAMERDQKPLHLERITEGDVVVGIASSGLHSNGFSLVRKI
 VAKSSLQYSSPAPDGCQDQTLGDL LTPTRIYSHSLLPVLRSGHVKAFAHITGGGLLENIPRVLPEKLG
 DLDAQWTRIPRVFSWLQQEHLSEEEMARTFNCVGVAVLVVSKEQTEQILRDIQQHKEEAWVIGSVVARA
 EGSPRVKVKNLIESMQINGSVLKNGSLTNHFSFEKKARVAVLISGTGSNLQALIDSTREPNSSAQIDIV
 ISNKAAVAGLDKAERAGIPTRVINHKLKYNRVEFDSAIDLVEEFSIDIVCLAGFMRILSGPFVQKWNK
 MLNIHPSLLPSFKGSNAHEQALETGVTVTGCTVHFVAEDVDAGQIILQEAVPVKRGDTVATLSERVKLA
 HKIFPAALQLVASGTVQLGENGKICWVKEE

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/ja3342_d02.zip

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:


ACCN: NM_001136005

ORF Size: 3030 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_001136005.1](#), [NP_001129477.1](#)

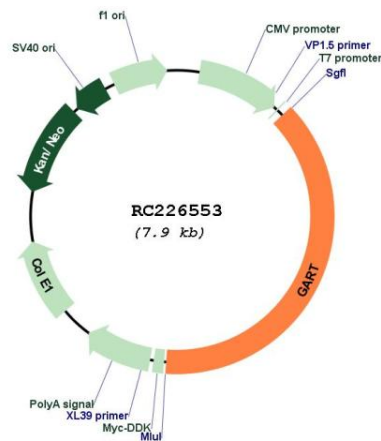
RefSeq Size: 3552 bp

RefSeq ORF: 3033 bp

Locus ID: 2618

UniProt ID: [P22102](#)
Cytogenetics: 21q22.11
Protein Pathways: Metabolic pathways, One carbon pool by folate, Purine metabolism
MW: 107.8 kDa
Gene Summary: The protein encoded by this gene is a trifunctional polypeptide. It has phosphoribosylglycinamide formyltransferase, phosphoribosylglycinamide synthetase, phosphoribosylaminoimidazole synthetase activity which is required for de novo purine biosynthesis. This enzyme is highly conserved in vertebrates. Alternative splicing of this gene results in two transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC226553