

Product datasheet for **SC119632**

GART (NM_000819) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GART (NM_000819) Human Untagged Clone
Tag:	Tag Free
Symbol:	GART
Synonyms:	AIRS; GARS; GARTF; PAIS; PGFT; PRGS
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL4</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >NCBI ORF sequence for NM_000819, the custom clone sequence may differ by one or more nucleotides

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CCGCGAATTCGGCAGGAGCGGGAACCAGGTGGCCACCCGGTGTCGGTTTCATTTCTTTGGAATTTCT
GCTTTACAGACAGAACAATGGCAGCCCGAGTACTTATAATTGGCAGTGGAGGAAGGGAACATACGCTGGC
CTGGAACCTTGACAGTCTCATCATGTCAAACAAGTGTGGTTGCCCCAGGAAACGCAGGCACTGCCTGC
TCTGAAAAGATTTCAAATACCGCCATCTCAATCAGTGACCACACTGCCCTTGCTCAATTCGCAAAGAGA
AGAAAATTGAATTTGTAGTTGTTGGACCAAGACCTCTGGCTGCTGGGATTGTTGGGAACCTGAGGTC
TGCAGGAGTGAATGCTTTGGCCCAACAGCAGAAGCGGCTCAGTTAGAGTCCAGCAAAAGGTTTGCCAAA
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GATACTGTTCTTCAGAGGACAGTGGATGGCATGCAGCAAGAGGGTACTCCATATACAGGTATTCTCTATG
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CCATGCAGGCACTGCCCTCAAAAATGGCAAAGTAGTAACATCATGGGGGTAGAGTCTTGCAGTACAGCC
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ACATGATACCATTGGTCAAGATTTGGTAGCAATGTGTGTTAATGATATTCTGCCACAAGGAGCAGAGCCC
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CTGGAAGAATCACTGAGGGTGTGTTGTTGTTGGAATAGCTTCACTGCTTTCATAGCAATGGATTTA
GCCTTGTGAGGAAAATCGTGGCAAAATCTTCCCTCCAGTACTCCTCTCCAGCACCTGATGGTTGTGGTGA
CCAGACTTTAGGGGACTTACTTCTCACGCCTACCAGAATCTACAGCCATTCACTGTTACCTGTCTACGT
TCAGGACATGTCAAAGCCTTTGCCCATATTACTGGTGGAGGATTACTAGAGAATCCCCAGAGTCTCC
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TCTGAAAGAGTAAAATTAGCAGAACATAAAAATTTTCTGCAGCCCTTCACTGGTGGCCAGTGGAACTG
TACAGCTTGGAGAAAATGGCAAGATCTGTTGGTTAAAGAGGAATGAAGCCTTTTAAATTCAGAAAATGGG
CCAGTTTAGAAAAGAAATTTTGTGTTTGCATGGTGGTTTTTATCATGGACTTGGCCAAAAGAAAAAC
TGCTAAA
    
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5' Read Nucleotide Sequence:	<p>>OriGene 5' read for NM_000819 unedited</p> <pre>NNGGTTCAGATTTGTATACGACTCACTATAGGCGGCCGCGAATTCGCACGAGGCGGGAAC CAGGTGGCCACCCGGTGTGCGTTTCATTTTCTTTGGAATTTCTGCTTTACAGACAGAAC AATGGCAGCCCGAGTACTTATAATTGGCAGTGGAGGAAGGAACATACGCTGGCCTGGAA ACTTGCACAGTCTCATCATGTCAAACAAGTGTGGTTGCCCCAGGAAACGCAGGCACTGC CTGCTCTGAAAAGATTTCAAATACCGCCATCTCAATCAGTGACCACTGCCCTTGCTCA ATTCTGCAAAGAGAAGAAAATTGAATTTGTAGTTGTTGGACCAGAAGCACCTCTGGTGC TGGGATTGTTGGGAACCTGAGGTCTGCAGGAGTGAATGCTTTGGCCCAACAGCAGAAGC GGCTCAGTTAGAGTCCAGCAAAAAGGTTTGC AAAAGAGTTTATGGACAGACATGGAATCCC AACCGCACAATGGAAGGCTTTCACCAAACCTGAAGAAGCCTGCAGCTTCATTTTGAGTGC AGACTTCCCTGCTTTGGTTGTGAAGGCCAGTGGTCTTGCAGCTGGAAAAGGGGTGATTGT TGCAAAGAGCAAAGAAGAGGCCTGCAAAGCTGTACAAGAGATCATGCAGGAGAAAGCCTT TGGGGCAGCTGGAGAAACAATTGCATTGAAGAATTCTTGACGGAGAAGAGGTGTCGTG TCTGTGTTTCACTGATGGCAAGACTGTGGCCCCATGCCNCAGCACAGGACCATTAGCG ATTACTGGAGGGAGATGGTGGGCCCTACACAGGNGGAATGGGAGCCTATTGTNCAGCCCT CAGGTTCTAATGATCTATTACTAANAAATAAGATACTGNTCTTCANNAAGACAGTGGATG GCATGCAGCNAGAGGGTACTCTNATACAGGTATTCTCTATGCTGGAATAATGCTGACC AGAATGGNCCAAAGTT</pre>
3' Read Nucleotide Sequence:	<p>>OriGene 3' read for NM_000819 unedited</p> <pre>CTANNGATCGATTTTTTTTTTTTTTTAGTGAGTCTCTATTTATTA AAAAAAAGATGA AGTAAGGGTGAGGTCTTTTTTGTCTTTTAGCAGTTTTTCTTTTGGCCAAGTCCATGATA AAAAACCACCATGCAAACAGCAAATAATCTTTCTAAACTGGCCCATTTCTGAATTA AA AGGCTTCAATCCTCTTTAACCCAACAGATCTTGCCATTTTCTCCAAGCTGTACAGTTCCA CTGGCCACCAGCTGAAGGGCTGCAGGAAATATTTTATGTTCTGCTAATTTTACTCTTTCA GAAAGAGTTGCGACAGTATCACCCCTTTCACGGGAACAGCTTCTTGCAAATAATCTGT CCAGCATCCACATCTTACAGTACAAAGTGTACAGTGCACCCAGTAACTGTGACTCCGGTT TCCAGGGCTTGCTCATGGGCATTTGAACCCTTAAAAGAAGGGAGCAAGGATGGGTGGATA TTGAGCATTTTTCTGTCCAGATATTAAGACAGCCACTCTGGCCTTTTTTTTTTCAAAA GAGAAATGATTTGTCAGGGAGCCATTCTCAACACTGACCCATTTATTTGCATGCTTTCA ATCAGATTTCTTGACTTTACACGTGGGGAACCTTCAGCTCGTGCAACCACACTGCCAATC ACCCAGGCTTCTTCTTGCTGCTGGATATCCCTCAGAATCTGCTCTGTCTGCTCCTTT GATACCACAAGGACAGCGCCAACCCACAGTAAATGTTCTGGCCATCTCTTCTCAGAA AGGTGCTCTTCTGCTGCAACCATGAGAAGACCCTGGGGATCCTCCAGGTCTGGGCATC</pre>
Restriction Sites:	NotI-NotI
ACCN:	NM_000819
Insert Size:	3500 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
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:	NM_000819.3 , NP_000810.1
RefSeq Size:	3376 bp
RefSeq ORF:	3033 bp
Locus ID:	2618
UniProt ID:	P22102
Cytogenetics:	21q22.11
Domains:	GARS, AIRS, formyl_transf
Protein Pathways:	Metabolic pathways, One carbon pool by folate, Purine metabolism
Gene Summary:	<p>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]</p> <p>Transcript Variant: This variant (1) encodes the longer protein (isoform 1). Variants 1, 3, and 4 encode the same protein.</p>