

Product datasheet for **SC118874**

GFPT1 (NM_002056) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GFPT1 (NM_002056) Human Untagged Clone
Tag:	Tag Free
Symbol:	GFPT1
Synonyms:	CMS12; CMSTA1; GFA; GFAT; GFAT 1; GFAT1; GFAT1m; GFPT; GFPT1L; MSLG
Mammalian Cell Selection:	None
Vector:	<u>pCMV6-XL5</u>
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene ORF within SC118874 sequence for NM_002056 edited (data generated by NextGen Sequencing)

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ATGTGTGGTATATTTGCTTACTTAACTACCATGTTCTCGAACGAGACGAGAAATCCTG
GAGACCCTAATCAAAGGCCTTCAGAGACTGGAGTACAGAGGATATGATTCTGCTGGTGTG
GGATTTGATGGAGGCAATGATAAAGATTGGGAAGCCAATGCCTGCAAAATCCAGCTTATT
AAGAAGAAAGGAAAAGTTAAGGCACTGGATGAAGAAGTTCACAAGCAACAAGATATGGAT
TTGGATATAGAATTTGATGTACACCTTGAATAGCTCATACCCGTTGGGCAACACATGGA
GAACCCAGTCCTGTCAATAGCCACCCCGCTCTGATAAAAATAATGAATTTATCGTT
ATTCACAATGGAATCATACCAACTACAAAGACTTGAAAAAGTTTTTGGAAAGCAAAGGC
TATGACTTCAATCTGAAACAGACACAGAGACAATTGCCAAGCTCGTTAAGTATATGTAT
GACAATCGGGAAAGTCAAGATACCAGCTTTACTACCTTGGTGGAGAGAGTTATCCAACAA
TTGGAAGGTGCTTTTGCACCTTGTGTTTAAAAGTGTTCATTTTCCCGGGCAAGCAGTTGGC
ACAAGGCGAGGTAGCCCTCTGTTGATTGGTGTACGGAGTGAACATAAACTTTCTACTGAT
CACATTCCTATACTCTACAGAACAGGCAAAGACAAGAAAGGAAGCTGCAATCTCTCTCGT
GTGGACAGCACAACTGCCTTTTCCCGGTGGAAGAAAAGCAGTGGAGTATTACTTTGCT
TCTGATGCAAGTCTGTATAGAACACACCAATCGCGTCATCTTCTGGAAGATGATGAT
GTTGCAGCAGTAGTGGATGGACGCTTTTCTATCCATCGAATTAACCGAACTGCAGGAGAT
CACCCCGGACGAGCTGTGCAAACTCCAGATGGAACCTCCAGCAGATCATGAAGGGCAAC
TTCAGTTCATTTATGCAGAAGGAAATATTTGAGCAGCCAGAGTCTGTCGTGAACACAATG
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AAGGAGATCCAGAGATGCCGGCCTTTGATTCTTATTGCTTGTGGAACAAGTTACCATGCT
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GCAAGTGACTTCTGGACAGAAACACACCAGTCTTTCGAGATGATTTTGCTTTTTCTT
AGTCAATCAGGTGAGACAGCAGATACTTTGATGGTCTTCGTTACTGTAAGGAGAGAGGA
GCTTTAACTGTGGGATCACAAACACAGTTGGCAGTTCATATCACGGGAGACAGATTGT
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CAGTTTGTATCCCTTGTGATGTTTGCCCTTATGATGTGTGATGATCGGATCTCCATGCAA
GAAAGACGCAAAGAGATCATGCTTGGATTGAAACGGCTGCCTGATTTGATTAAGGAAGTA
CTGAGCATGGATGACGAAATTCAGAACTAGCAACAGAACTTTATCATCAGAAGTCAGTT
CTGATAATGGGACGAGGCTATCATTATGCTACTTGTCTTGAAGGGGCACTGAAAATCAA
GAAATTACTTATATGCACTCTGAAGGCATCCTTGTGTTGAATTGAAACATGGCCCTCTG
GCTTTGGTGGATAAATTGATGCCTGTGATCATGATCATGAGAGATCACACTTATGCC
AAGTGTGAGAATGCTCTTCAGCAAGTGGTTGCTCGGCAGGGGCGCCTGTGGTAATTTGT
GATAAGGAGGATACTGAGACCATTAAGAACACAAAAAGAACGATCAAGGTGCCCCACTCA
GTGGACTGCTTGCAGGGCATTCTCAGCGTATCCCTTTACAGTTGCTGGCTTTCCACCTT
GCTGTGCTGAGAGGCTATGATGTTGATTTCCACGGAATCTTGCCAAATCTGTGACTGTA
GAGTGA
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Clone variation with respect to NM_002056.3

5' Read Nucleotide Sequence:

>OriGene 5' read for NM_002056 unedited
 CACTCGGNGATTTGTNAAACCGACTTACTNATAGGNNCGGCCGCGCATTCCGGCACGAGGC
 GGAGCCCCGGGAGGCGGAGAAGGCTGTCGTTGCCTTGGCCGTGCGATCCCCGAGGGAGTCG
 TGTCCGGCCACCCCGGCCCCGAGCCCGCAGATTGCCACCCGAAGCTCGTGTGTGCACC
 CCCGATCCCGCCAGCCACTCGCCCTGGCCTCGCGGGCCGTGTCTCCGGCATCATGTGTG
 GTATATTTGCTTACTTAAACTACCATGTTCTCGAACGAGACGAGAAATCCTGGAGACCC
 TAATCAAAGGCCTTCAGAGACTGGAGTACAGAGGATATGATTCTGCTGGTGTGGGATTTG
 ATGGAGGCAATGATAAAGATTGGGAAGCCAATGCCTGCAAAATCCAGCTTATTAAGAAGA
 AAGGAAAAGTTAAGGCACTGGATGAAGAAGTTCACAAGCAACAAGATATGGATTTGGATA
 TAGAATTTGATGTACACCTTGGAAATAGCTCATACCCGTTGGGCAACACATGGAGAACCCA
 GTCCTGTCAATAGCCACCCCGAGCGCTCTGATAAAAATAATGAATTTATCGTTATTCACA
 ATGGAATCATCACCACTACAAAGACTTGAAAAAGTTTTTGGAAAGCAAAGGCTATGACT
 TCGAATCTGANACAGACACAGACAATTGCCAAGCTCGTTAAGTATATGTATGACAATC
 GGGAAAAGTCAAGTACCAGCTTTACTACCTTGGTGGAGAGAGTTATCCAACAATTGGAAG
 GTGCTTTTGCCTTGTGTTAAAGTGTTCAATTTCCCGGGCAAGCAGTTGCCACAAGGCG
 AGGTAGCCCTCTGTTGATTGGTGTACGGAGTGAACATAAACTTTTACTGATCACATTCC
 TATACTCTACAGAACAGGCAAAGACAGA

3' Read Nucleotide Sequence:

>OriGene 3' read for NM_002056 unedited
 GGGGGGGTGGTTNACAANNAAAATATAAAACCNNGGTGTTCTGTTNATTTNATAANCCT
 TCTGTGTTGTNGATTTAANAACAGTAAAAATTGTCATTCAGCAGTCATTTTAAAAAATA
 AAAAATACAGATACAAGGAAATAAAAACACTTTTAGGAGATGAAAACACAAAGTAGTA
 GGATACCCAACATGTACACATCCCATCTTCAAATTTAAAATCATATTGTCAGTTGTCCAA
 AGCAGCTTGAATTTAAAGTTTGTCTATAAAATTTGTGCAATATGTTAAGGATTGAGACC
 CACCAATGCACTACTGTAATATTTTCGCTTCCCTAAATTTCTCCACCTACAGATAATAGAC
 ACAAAGTCTGAGAAACTAAGGCTAACCAAACTTAGATATAAATCCTACCAATAAAATTTT
 TCAGTTTTAAGTTTTACAGTTTGATTTAAAAACAAAACAGAAACAAATTTCAAATAAAT
 CACATCTTCTCTAAAACCTTGGCAAACCTTCCCTAACTGTCCAAGTATGAGCATACACT
 GCCACTGGCTTTAGATACTCCAATTAATGCCTACTCTTTCCTGCTGAATGAAGTA
 TGGTGAACAAGTACCAATTTTTTAAACATATTGTCTTTTTTAAATTTGAAGGGGGGGGT
 CCAAAAATGAGACAACCAATTTTTTAAAAAAGCTTAAAAATTTTTTTTGGAT
 AACAAATTCCAAATGAAATTCCTTTTTTAAAAAGTTTTTCCAACAATTTTCTGGGGA
 AAAATTAAGGGGGTCTTTCAACAAAAAACAATTTTTTGGGGGGAATAAATTTAAC
 ACGGGGTGTTTTAAAAAAGGGGTGCTTCAAAAAAAGGCTTGGAGGGGGGGTTTTT
 TTTAAAAAAGGGGTTAATAAAC

Restriction Sites:

NotI-NotI

ACCN:

NM_002056

Insert Size:

3460 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_002056.1 , NP_002047.1
RefSeq Size:	8649 bp
RefSeq ORF:	2046 bp
Locus ID:	2673
UniProt ID:	Q06210
Cytogenetics:	2p13.3
Domains:	GATase_2, SIS
Protein Families:	Protease
Protein Pathways:	Alanine, aspartate and glutamate metabolism, Amino sugar and nucleotide sugar metabolism, Metabolic pathways
Gene Summary:	<p>This gene encodes the first and rate-limiting enzyme of the hexosamine pathway and controls the flux of glucose into the hexosamine pathway. The product of this gene catalyzes the formation of glucosamine 6-phosphate. [provided by RefSeq, Sep 2008]</p> <p>Transcript Variant: This variant (2) lacks an alternate exon in the coding region, compared to variant 1. The resulting protein (isoform 2) is shorter when it is compared to isoform 1.</p> <p>Sequence Note: The RefSeq transcript and protein were derived from transcript and genomic sequence to make the sequence consistent with the reference genome assembly. The genomic coordinates used for the transcript record were based on alignments.</p>