

Product datasheet for **RC234739**

GFPT1 (NM_001244710) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	GFPT1 (NM_001244710) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	GFPT1
Synonyms:	CMS12; CMSTA1; GFA; GFAT; GFAT 1; GFAT1; GFAT1m; GFPT; GFPT1L; MSLG
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide
Sequence:**

>RC234739 representing NM_001244710
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTGTGGTATATTTGCTTACTTAACTACCATGTTCTCGAACGAGACGAGAAATCCTGGAGACCCTAA
 TCAAAGGCCTTCAGAGACTGGAGTACAGAGGATATGATTCTGCTGGTGTGGGATTTGATGGAGGCAATGA
 TAAAGATTGGGAAGCCAATGCCTGCAAAATCCAGCTTATTAAGAAGAAAAGGAAAAGTTAAGGCACTGGAT
 GAAGAAGTTCACAAGCAACAAGATATGGATTTGGATATAGAATTTGATGTACACCTTGGAAATAGCTCATA
 CCCGTTGGGCAACACATGGAGAACCAGTCTGTCAATAGCCACCCCGAGCGCTCTGATAAAAAAATGA
 ATTTATCGTTATTCACAATGGAATCATCACCAACTACAAAGACTTGAAAAAGTTTTGGAAAAGCAAAGGC
 TATGACTTCGAATCTGAAACAGACACAGAGACAATTGCCAAGCTCGTTAAGTATATGTATGACAATCGGG
 AAAGTCAAGATACCAGCTTTACTACCTTGGTGGAGAGAGTTATCCAACAATTGGAAGGTGCTTTTGCCT
 TGTGTTTTAAAAGTGTTCATTTTCCGGGCAAGCAGTTGGCACAAGGCGAGGTAGCCCTCTGTTGATTGGT
 GTACGGAGTGAACATAAACTTTCTACTGATCACATTCTATACTCTACAGAACAGCTAGGACTCAGATTG
 GATCAAAATTCACACGGTGGGGATCACAGGGAGAAAGAGGCAAAGACAAGAAAGGAAAGCTGCAATCTCTC
 TCGTGTGGACAGCACAACTGCCTTTTCCGGTGGAAAGAAAAGCAGTGGAGTATTACTTTGCTTCTGAT
 GCAAGTGTCTGATAGAACACACCAATCGCGTCATCTTTCTGGAAGATGATGATGTTGCAGCAGTAGTGG
 ATGGACGCTCTTTCTATCCATCGAATTAACGAAGTGCAGGAGATCACCCCGGACGAGCTGTGCAAACT
 CCAGATGGAATCCAGCAGATCATGAAGGGCAACTCAGTTCATTTATGCAGAAGGAAATATTTGAGCAG
 CCAGAGTCTGTCGTGAACACAATGAGAGGAAGAGTCAACTTTGATGACTATACTGTGAATTTGGTGGTT
 TGAAGGATCACATAAAGGAGATCCAGAGATGCCGGCGTTTGATTCTTATTGCTTGTGGAACAAGTTACCA
 TGCTGGTGTAGCAACACGTCAGTTCTTGAGGAGCTGACTGAGTTGCCTGTGATGGTGGAACTAGCAAGT
 GACTTCTGGACAGAAACACACCAGTCTTTCGAGATGATGTTTGCTTTTTCTTAGTCAATCAGGTGAGA
 CAGCAGATACTTTGATGGGTCTTCGTTACTGTAAGGAGAGAGGAGCTTTAACTGTGGGGATCACAAACAC
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 GCCAGTACAAAGGCTTATACCAGCCAGTTGTATCCCTTGTGATGTTGCCCTTATGATGTGTGATGATC
 GGATCTCCATGCAAGAAAGACGCAAGAGATCATGCTTGGATTGAAACGGCTGCCTGATTTGATTAAGGA
 AGTACTGAGCATGGATGACGAAATTCAGAACTAGCAACAGAATTTATCATCAGAAGTCAGTTCTGATA
 ATGGGACGAGGCTATCATTATGCTACTTGTCTTGAAGGGGCACTGAAAATCAAAGAAATTACTTATATGC
 ACTCTGAAGGCATCCTTGTGTTGAATTGAAACATGGCCCTCTGGCTTTGGTGGATAAATTTGATGCCTGT
 GATCATGATCATCATGAGAGATCACACTTATGCCAAGTGTGAGAATGCTCTTCAGCAAGTGGTTGCTCGG
 CAGGGGCGGCCTGTGGTAATTTGTGATAAGGAGGATACTGAGACCATTAAGAACACAAAAAGAACGATCA
 AGGTGCCCCACTCAGTGGACTGCTTGCAGGGCATTCTCAGCGTGATCCCTTTACAGTTGCTGGCTTTCCA
 CCTTGCTGTGCTGAGAGGCTATGATGTTGATTTCCACGGAACTTGCCAAATCTGTGACTGTAGAG

ACGCGTACGCGGGCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC234739 representing NM_001244710
Red=Cloning site Green=Tags(s)

MCGIFAYLNYHVPRTREILETLIKGLQRLEYRGYDSAGVGFDDGNDKDWEANACKIQLIKKKGKVKALD
 EEVHKQQDMDLDIEFDVHLGIAHTRWATHGEPSPVNSHPQRSKDNNEFIVIHNGIITNYKDLKKFLESKG
 YDFESETDTETIAKLVKMYDNRRESQDTSFTTLVERVIQQLLEGAFALVFKSVHFPQAVGTRRGSPLLI
 VRSEHKLSTDHIPILYRTARTQIGSKFTRWGSQGERGKDKKGCNLSRVDSTTCLFPVEEKAVEYYFASD
 ASAVIEHTNRVIFLEDDVAAVVDGRLSIHRIKRTAGDHPGRAVQTLQMEQQIMKGNFSSFMQKEIFEQ
 PESVVTMRGRVNFDDYVNLGGLKDHKEIQRCLLILACGTSYHAGVATRQVLEELTELPVMVELAS
 DFLDRNTPVFRDDVCFVLSQSGETADTLMGLRYCKERGALTVGITNTVGSISRETCGVHINAGPEIGV
 ASTKAYTSQFVSLVMFALMMDDRISMQRERKEIMLGLKRLPDLIKEVLSMDDEIQKLATELYHQKSVLI
 MGRGYHYATCLEGALKIKEITYMHSEGILAGELKHGPLALVDKMPVIMIIMRDHTYAKCQNALQQVVAR
 QGRPVVICDKEDTETIKNTKRTIKVPHSVDCLOGILSVIPLQLLAFHLAVLRGYDVFPRNLAKSVTVE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_001244710

ORF Size: 2097 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_001244710.2](#)

RefSeq Size: 8703 bp

RefSeq ORF: 2100 bp

Locus ID: 2673

UniProt ID: [Q06210](#)

Cytogenetics: 2p13.3

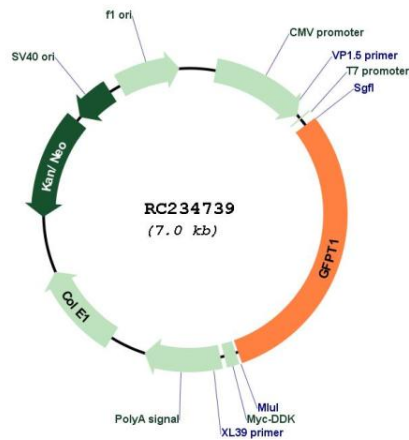
Protein Families: Protease

Protein Pathways: Alanine, aspartate and glutamate metabolism, Amino sugar and nucleotide sugar metabolism, Metabolic pathways

MW: 79.3 kDa

Gene Summary: 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]

Product images:



Circular map for RC234739