

## Product datasheet for **MG210002**

### **Gfpt1 (NM\_013528) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	Gfpt1 (NM_013528) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gfpt1
Synonyms:	2810423A18Rik; AI324119; AI449986; GFA; GFAT; GFAT1; GFAT1m; Gfpt
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>MG210002 representing NM\_013528  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGTGCGGTATATTTGCTTATTTAAATTACCATGTTCTCGAACAAAGACGAGAAATCTTGGAGACTAA  
 TCAAAGGCCTTCAGAGACTGGAATACAGAGGATATGATTCTGCTGGTGTGGGACTTGACGGAGGCAATGA  
 CAAAGACTGGGAAGCAACGCCTGCAAAATCCAGCTCATTAAAGAAGAAAGGAAAAGTTAAGGCACTGGAT  
 GAAGAAGTTCACAAACAACAAGATATGGACTTGGATATAGAATTTGATGTGCATCTTGGAAATAGCTCATA  
 CCCGTTGGGCGACACATGGAGAACCCAATCCTGTCAATAGTCACCCCAGCGCTCTGATAAAAAAATGA  
 ATTCATTGTTATTCATAATGGAATCATCACCAACTACAAAGACTTGAAAAAGTTTCTGGAAAGCAAAGGC  
 TATGACTTTGAATCTGAAACAGACACAGAAACCATTGCCAAGCTCGTCAAGTACATGTATGACAACCTGGG  
 AGAGCCAGGACGTCAGTTTTACCACCTTGGTGGAGAGAGTTATCCAACAATTGGAAGGCGCCTTTGCTCT  
 TGTGTTTTAAAAGTGTCCATTTTCCGGGCAAGCAGTTGGCACAAGGCGAGGTAGCCCTCTCTTGATTGGT  
 GTGCGGAGTGAACATAAGCTTTCTACAGATCACATTCCGATTCTGTACAGAACAGGCAAAGACAAGAAAG  
 GAAGCTGCGGTCTTTCCCGTGTGGACAGCACGACATGCCTGTTCCCTGTTGAGGAAAAGGCAAGTTGAATA  
 TTACTTTGCTTCTGATGCAAGTGCCGTGATAGAGCACACCAATCGTGTCACTTTCTGGAAGATGATGAT  
 GTTGACAGCAGTGGTGGATGGCCGTCTCTATCCACCGAATTAACGAACTGCAGGAGACCATCCTGGCC  
 GAGCTGTGCAAACTCTCCAGATGGAGCTCCAGCAGATCATGAAGGGCAACTTTAGTTCATTTATGCAGAA  
 GGAAATTTTGGAGGTTTAAAGATCACATTAAGGAGATCCAGCGGTGTCGGCGGTTGATTCTTATTGCTT  
 GTGGCACAAGTTACCACGCTGGTGTGGCAACCCGTCAGGTCTGGAGGAGCTGACCGAGCTGCCCGTGAT  
 GGTGGAGCTTGCCAGTGACTTCTTGATAGAAACACTCCAGTCTTTCGAGATGATGTTTGTCTTTTCATT  
 AGTCAATCAGGCGAGACAGCTGACACCCTGATGGGACTTCGTTACTGTAAGGAGAGAGGACCTTAAGT  
 TGGGGATCACAAATACAGTCGGCAGTCTATATCAAGGGAGACAGATTGCGGGGTTCATATTAATGCTGG  
 TCCTGAGATTGGCGTGGCCAGTACAAAGGCATACACCAGCCAGTTTGTGTCCCTCGTGATGTTTGTCTC  
 ATGATGTGTGATGACAGGATCTCCATGCAAGAGAGACGCAAAGAGATCATGCTCGGACTGAAGCGACTGC  
 CGGACTTGATTAAGGAAGTGTGAGCATGGATGATGAAATCCAGAAGCTGGCGACGGAGCTTTACCACCA  
 GAAGTCGGTCTGATAATGGGGCGGGCTACCATTATGCTACATGCCTTGAAGGGGCTCTGAAAATCAAG  
 GAGATTACTTATATGCATTCGGAAGGCATCCTTGTGCTGAGCTCAAGCACGGCCCTCTGGCCTTGGTGG  
 ACAAGTTGATGCCTGTATCATGATCATCATGCGAGACCACCTTATGCCAAGTGCCAGAACGCTCTTCA  
 GCAGGTGGTTGCACGGCAGGGGCGTCCAGTCGTGATCTGTGATAAGGAGGATACTGAGACCATTAAGAAT  
 ACAAAAAGGACAAATCAAGGTGCCCACTCAGTGGACTGCTTGCAGGGCATTCTCAGTGTGATTCCCTGCG  
 AGCTGCTGGCTTCCACCTGGCTGTGCTGAGAGGCTACGATGTTGATTTCCACGGAATCTTGCCAAATC  
 TGTAACAGTAGAG

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

**Protein Sequence:** >MG210002 representing NM\_013528  
 Red=Cloning site Green=Tags(s)

MCGIFAYLNYHVPRTREILETLIKGLQRLEYRGYDSAGVGLDGGNDKDWEANACKIQLIKKKGKVKALD  
 EEVHKQDMDLDIEFDVHLGIAHTRWATHGEPNPVNSHPQRSKDNNEFIVIHNGIITNYKDLKKFLESKG  
 YDFESETDTETIAKLVKMYDNWESQDVSFTTLVERVIQQLLEGAFALVFKSVHFPQAVGTRRGSPLLI  
 VRSEHKLSTDHIPILYRTGKDKKGGSCGLSRVDSTTCLFPVEEKAVEYFFASDASAVIEHTNRVIFLEDD  
 VAAVVDGRLSIHRIKRTAGDHPGRAVQTLQMEQQIMKGNFSSFMQKEIFEQPESVNTMRGRVNFDDYT  
 VNLGGLKDHIKEIQRCRRLILIACGTSYHAGVATRQVLEELTELPVMVELASDFLDRNTPVFRDDVCF  
 SQSGETADTLMGLRYCKERGALTVGITNTVGSISRETDCGVHINAGPEIGVASTKAYTSQFVSLVMFAL  
 MCCRDRISMQRERKEIMLGLKRLPDLIKEVLSMDDEIQKLATELYHQKSVLIMGRGYHYATCLEGALKIK  
 EITYMHSEGILAGELKHGPLALVDKLMPIVIMIMRDHTYAKCQNALQQVVARQGRPVVICDKEDTETIKN  
 TKRTIKVPHSVDCLOGILSVIPLQLLAFHLAVLRGYDVFPRNLAKSVTVE

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_013528

**ORF Size:** 2043 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\\_013528.3](#)

**RefSeq Size:** 2408 bp

**RefSeq ORF:** 2046 bp

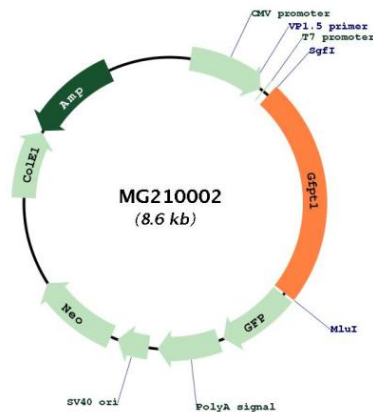
**Locus ID:** 14583

**UniProt ID:** [P47856](#)

**Cytogenetics:** 6 37.81 cM

**Gene Summary:** Controls the flux of glucose into the hexosamine pathway. Most likely involved in regulating the availability of precursors for N- and O-linked glycosylation of proteins. Regulates the circadian expression of clock genes ARNTL/BMAL1 and CRY1.[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MG210002