

Product datasheet for **MG219331**

Gpd2 (NM_010274) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Gpd2 (NM_010274) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Gpd2
Synonyms:	AA408484; AI448216; AU021455; AW494132; Gdm1; Gpd-m; GPDH; Gpdh-m; TISP38
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>MG219331 representing NM_010274
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGC**

ATGGCGTTTCAAAGGCCAGTGAAGGGGACTATTCTTGTGGGTGGAGGAGCTCTGGCCACTGTTTTGGGAC
 TCTCTCAGTTTGCTCATTACAGAAGGAAGCAAGTGAGCCTGGCGTATGTGGAAGCAGCAGGATACCTCAC
 GGAGCCTGTGAACAGGGAACCTCCCTCCAGAGAAGCTCAGCTCATGACTTTGAAGAACACACCCGAATTT
 GACATCCTTGTATCGGAGGCGGAGCCACAGGGTGTGGCTGTGCACTAGATGCCGTACCCAGAGGACTGA
 AAACAGCCCTTGTAGAGAGAGATGACTTCTCATCGGGGACTAGCAGTAGAAGCACTAAATTGATCCACGG
 TGGTGTGCGATACCTCCAGAAGGCTATCATGAACCTGGATGTTGAGCAGTATAGGATGGTAAAGAAGCC
 CTTACGAACGTGCCAATTACTAGAAATCGCTCCTCATTTATCAGCTCCGTTGCCTATCATGCTCCAC
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 ACAGGTTGAGCTGCACGAGTTTCTGCAGCTGATGAGCGCAGTTTCAAGGAAGGAGGTCTCTGGAAGCCGA
 CTTGCCATCCTGATGAAAACCTGCCGAGGAGAAGTTGGACCGCAGAGTTCCAATCCCCGTGGACCGTAGTT
 GTGGAGGATTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

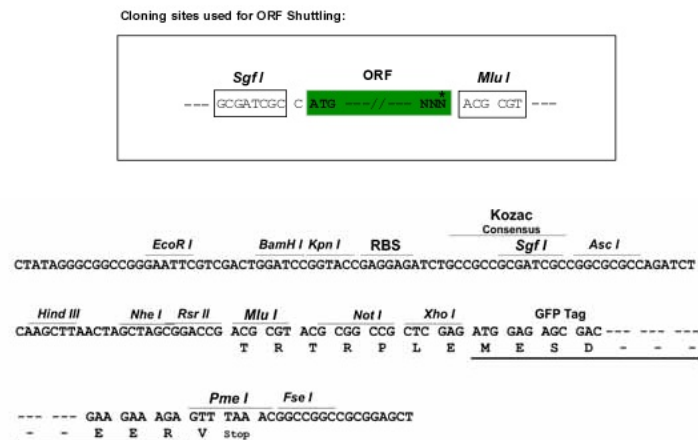
Protein Sequence: >MG219331 representing NM_010274
 Red=Cloning site Green=Tags(s)

MAFQKAVKGTILVGGALATVLGLSQFAHYRRKQVSLAYVEAAGYLTEPVNREPPSREAQLMTLKNTPEF
 DILVIGGGATGCGCALDAVTRGLKTALVERDDFSSGTSSRSTKLIHGVRYLQKAIMNL DVEQYRMVKEA
 LHERANLLEIAPHLSAPLPIMLPYKWWQLPYWVGIMYDLVAGSQCLKSSYVLSKSRAL EHFPM LQKD
 KLVGAIVYYDGGHNDARMNLAI ALTAARYGAATANYMEVVSLLKKTD PETGKERVSGARCKDVL TGQEFD
 VRAKCVINASGPF TDSVRKMDDKNVVPICQPSAGVHI VMPGYSPENMGLLD PATSDGRVIFFLPWEKMT
 IAGTTDTPDVT HHPIPSEEDINFILNEVRNYLSSDVEVRRGDVLA AWSGIRPLVTDPKSADTQSISR NH
 VVDISDSGLITIAGGKWT TYRSM AEDTVNA AVKFHNLNAGPSRTVGLFLQGGKDWSP TLYIRLVQDYGLE
 SEVAQHLAKTYGDKAFEVAKMASVTGKRWPVVGVR LVSEFPYIEAEVKYGIKEYACTAVDMI SRTRLAF
 LNVQAAEEALPRIVELMGREL NWS E L R K Q E E L E T A T R F L Y Y E M G Y K S R T E Q L T D S T E I S L L P S D I D R Y K K
 RFHKFDEDEKGFITIVDQVRVLESINVQMDENTLHEILCEVDL N K N G Q V E L H E F L Q L M S A V Q K G R V S G S R
 LAILMKTAENLDRRVP IPVDRSCGGL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_010274

ORF Size: 2181 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_010274.2](#)

RefSeq Size: 5620 bp

RefSeq ORF: 2184 bp

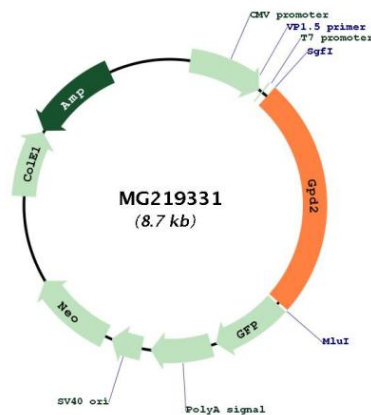
Locus ID: 14571

UniProt ID: [Q64521](#)

Cytogenetics: 2 31.66 cM

Gene Summary: Calcium-responsive mitochondrial glycerol-3-phosphate dehydrogenase which seems to be a key component of the pancreatic beta-cell glucose-sensing device.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG219331