

## Product datasheet for **MR208269**

### **G6pdx (NM\_008062) Mouse Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	G6pdx (NM_008062) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	G6pdx
Synonyms:	G6pd; G28A; Gpdx
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR208269 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCAGAGCAGGTGCCCTGAGCCGACCAGGTGTGTGGGATCCTGAGGGAAGAGTTGTACCAGGGTG  
 ATGCCTTCCACCAAGCTGATACACATATTTATCATCATGGGTGCATCGGGTGACTGGCCAAGAAGAA  
 GATCTATCCTACCATCTGGTGGCTGTTCCGGGATGGCCTTCTACCTGAAGATACCTTCATTGTGGGCTAT  
 GCCCGCTCAGACTCACAGTGGACGACATCCGAAAGCAGAGTGAGCCCTTCTTTAAAGCCACTCCAGAAG  
 AAAGACCTAAGCTGGAGGAGTCTTTGCCCGTAATTCCTATGTAGCTGGCCAGTATGATGATGCAGCCTC  
 CTATAAGCACCTCAACAGCCACATGAATGCCCTGCACCAGGGGATGCAGGCCAACCGTCTATTCTACCTG  
 GCCTTGCCCCCACAGTCTATGAAGCAGTACCAAGAACATTCAAGAGACCTGCATGAGTCAGACAGGCT  
 GGAACCGCATCATCGTGGAGAAGCCCTTCGGGAGAGACCTACAGAGCTCCAATCAACTGTGGAACCAT  
 CTCCTCTCTTTCCGTGAGGACCAGATCTACCGATTGACCACTACCTGGCAAAGAGATGTTCCAGAAT  
 CTATGGTGTGAGGTTTGCCAACAGGATCTTTGGCCCATCTGGAATCGAGACAACATTGCTTGTGTGA  
 TCCTCACATTTAAAGAGCCCTTTGGTACTGAGGGTCGTGGGGGCTATTTTGATGAATTTGGGATCATCAG  
 GGATGTTATGCAGAACCCCTCCTGCAGATGTTGTGTCTGGTGGCCATGGAAAAGCTGCCACTACAGGT  
 TCAGATGATGTCCGTGATGAGAAGGTCAAAGTGTGAAGTGTATCTCAGAGGTGGAACTGACAACGTGG  
 TCCTTGGCCAATATGTGGGGAACCCCAATGGAGAAGGAGAAGCTGCCAATGGATACTTAGATGACCCAC  
 AGTACCCCATGGGTCCACCACTGCCACTTTTGCAGCAGCTGTCTCTATGTGGAGAATGAACGGTGGGAC  
 GGGTACCCTTCACTCTGCGCTGTGGCAAAGCCCTGAATGAACGCAAAGCTGAAGTGAGACTGCAGTTC  
 GAGACGTGGCAGGTGACATCTTCCACCAAGTGAAGCTGAAGCTGAAGTGGTGCATCCGTGTCAGCCAA  
 TGAGGCAGTATACACCAAGATGATGACCAAGAAGCCCTGGCATGTTCTTTAACCTGAGGAGTCGGAGCTG  
 GATCTAACTTATGGCAACAGATACAAGAATGTGAAGCTCCCTGATGCCTATGAACGCTCATCTGGATG  
 TCTTCTGTGGGAGCCAGATGCACCTTTGTCCGGAGTGATGAACTCAGGGAAGCCTGGCGTATCTTACACC  
 ACTGCTGCACAAGATTGATCGAGAAAAGCCCCAGCCCATCCCCTATGTATATGGCAGCCGCGCCCCACA  
 GAGGCAGATGAGCTGATGAAGAGAGTGGCTTCCAGTACGAGGGTACCTACAAGTGGTGAACCCCTCACA  
 AGCTC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>MR208269 protein sequence  
 Red=Cloning site Green=Tags(s)

MAEQVALSRTQVCGILREEL YQGD AFHQADTHIF IIMGASGDLAKKKIYPTIWWLFRDGLLPEDTFIVGY  
 ARSRLTVDDIRKQSEPFKATPEERPKLEEFFARNSYVAGQYDDAASYKHLNSHMNALHQMQANRLFYL  
 ALPPTVYEA VTKNIQETCMSQTGWNRIIVEKPFGRDLQSSNQLSNHISSLFREDQIYRIDHYLGKEMVQN  
 LMVLRFANRIFGPIWNRDNIACVILTFKEPFGTEGRGGYDFEFGIIRDVMQNHLQLMLCLVAMEKPATTG  
 SDDVRDEKVKVLKCISEVETDNVVLGQYVGNPNGEAANGYLDPTVPHGSTTATFAAVLYVENERWD  
 GVPFILRCGKALNERKAEVRLQFRDVAGDIFHQCKRNELVIRVQPNEAVYTKMMTKKPGMFFNPEESEL  
 DLTYGNYRKNVLPDAYERLILDVFCGSQMHFVRSDELREAWRIFTPLLHKIDREKQPPIPVVYGSRGPT  
 EADELMKRVGFQYEGTYKVVNPHKL

**TRTRPLEQKLI**SEEDLAANDILDYKDDDDKV

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_008062

**ORF Size:** 1548 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\\_008062.3](#)

**RefSeq Size:** 2639 bp

**RefSeq ORF:** 1548 bp

**Locus ID:** 14381

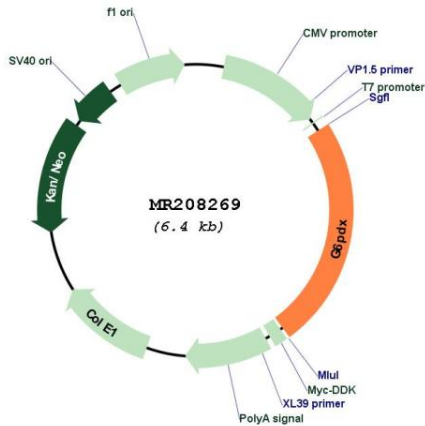
**UniProt ID:** [Q00612](#)

**Cytogenetics:** X 38.0 cM

**MW:** 59.3 kDa

**Gene Summary:** Catalyzes the rate-limiting step of the oxidative pentose-phosphate pathway, which represents a route for the dissimilation of carbohydrates besides glycolysis. The main function of this enzyme is to provide reducing power (NADPH) and pentose phosphates for fatty acid and nucleic acid synthesis (By similarity).[UniProtKB/Swiss-Prot Function]

**Product images:**



Circular map for MR208269