

Product datasheet for **RR212866**

G6pd (NM_017006) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	G6pd (NM_017006) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	G6pd
Synonyms:	G6pdx
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RR212866 representing NM_017006
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**GCGATCGCC**

ATGGCAGAGCAGGTGGCTTTGAGCCGACCAGGTGTGTGGGATCCTGAGGGAAGAGTTGTACCAGGGTG
 ATGCCTTCCACCAAGCTGATACACATATTTATCATCATGGGTGCATCGGGTGACTGGCCAAGAAGAA
 GATTTATCCTACCATCTGGTGGCTGTTCCGGGATGGCCTTCTACCCGAAGACACCTTCATTGTAGGCTAT
 GCCCGCTCACGACTCACAGTGGATGACATCCGCAACAGAGTGAGCCCTTCTTTAAAGTCACTCCAGAAG
 AAAGACCAAGCTAGAGGAGTCTTTGCCCGTAACTCCTATGTAGCTGGCCAGTATGATGATCCAGCCTC
 CTACAAGCACCTCAACAGCCACATGAATGCCCTGCACCAGGGAATGCAGGCCAACCGTCTGTTCTACCTG
 GCCTTGCCCCCTGTCTATGAAGCAGTACCAAGAACATTCAAGAGATCTGCATGAGTCAGACAGGCT
 GGAACCGCATCATAGTGGAGAAGCCCTTCGGGAGAGACCTGCAGAGCTCCAATCAACTGTGCAACCAT
 CTCCTCTCTGTTTCGTGAGGACCAGATCTACCGATTGACCACTACCTGGGCAAAGAGATGTTCCAGAAC
 CTATGGTGTGAGATTTGCCAACAGGATCTTTGGACCATCTGGAATCGAGACAACATTGCTTGTGTGA
 TCCTTACATTTAAAGAGCCCTTTGGTACTGAGGGTCGTGGGGGCTATTTTGATGAATTTGGGATCATCAG
 GGATGTGATGCAGAACCCCTCCTGCAGATGTTGTGTCTAGTGGCCATGGAAAAGCCTGCCTCTACAGAT
 TCAGATGATGCCGTGATGAGAAGGTCAAAGTGTAAAAATGATCTCAGAGGTGGAACTGACAACGTGG
 TCCTTGGCCAGTATGTGGGGAACCCAGTGGAGAAGGAGAAGCTACCAATGGGTACTTAGATGACCCAC
 AGTACCCCATGGGTCTACCACTGCTACCTTTCAGCAGCTGTCTCTATGTGGAGAATGAACGGTGGGAT
 GGAGTACCCTTCACTCTGCGCTGTGGCAAAGCTCTGAATGAGCGCAAAGCTGAAGTGAGACTTCAGTTCC
 GCGATGTGGCAGGTGACATCTTCCACAGCAGTGAAGCGTAACGAGCTGGTCATCCGTGTGACGCCAA
 TGAGGCGGTATACACCAAGATGATGACCAAGAAGCCTGGCATGTTCTTCAACCCTGAGGAGTCTGAGCTG
 GACCTAACCTATGGCAACAGATACAAGAATGTGAAGCTCCTGATGCCTATGAACGCTCATCCTGGATG
 TCTTCTGTGGGAGCCAAATGCACCTTGTCCGTAGTGATGAACTCAGGGAAGCCTGGCGTATCTTACACC
 ATTGCTGCACAAGATTGATCGAGAGAAGCCCCAGCCCATCCCGTATGTCTATGGCAGCCGAGGTCCACA
 GAGGCAGATGAGCTGATGAAGAGAGTGGCTTCCAGTATGAGGGTACCTACAAGTGGTGAACCCCTCACA
 AGCTC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RR212866 representing NM_017006
 Red=Cloning site Green=Tags(s)

MAEQVALSRTQVCGILREELYQGDFAHQADTHIFIIMGASGDLAKKKIYPTIWWLFRDGLLPEDTFIVGY
 ARSRLTVDDIRKQSEPFKVTPEERPKLEEFFARNSSYVAGQYDDPASYKHLNSHMNALHQMQANRLFYL
 ALPPTVYEAVTKNIQEICMSQTGWNRIIVEKPFGRDLQSSNQLSNHISSLFREDQIYRIDHYLGKEMVQN
 LMVLRFANRIFGPIWNRDNIACVILTFKEPFGTEGRGGYDFEFGIIRDVMQNHLQLMLCLVAMEKPASTD
 SDDVRDEKVKVLKCISEVETDNVVLGQYVGNPSGEGEATNGYLDPTVPHGSTTATFAAAVLVENERWD
 GVPFILRCGKALNERKAEVRLQFRDVAGDIFHQCKRNELVIRVQPNEAVYTKMMTKKPGMFFNPEESEL
 DLTYGNYRKNVLPDAYERLILDVFCGSQMHFVRSDELREAWRIFTPLLHKIDREKQPPIPVVYGSRGPT
 EADELMKRVGFFQYEGTYKVVNPHKL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



* The last codon before the Stop codon of the ORF

ACCN: NM_017006

ORF Size: 1545 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_017006.2](#), [NP_058702.1](#)
RefSeq Size: 2408 bp

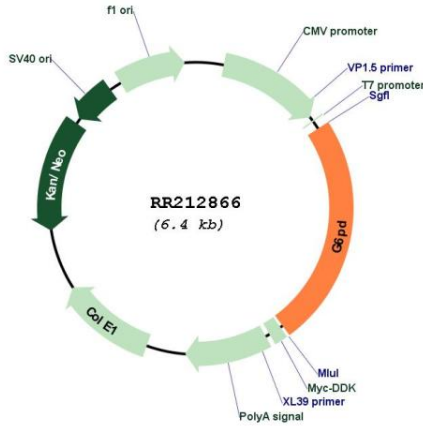
RefSeq ORF: 1548 bp

Locus ID: 24377

UniProt ID: [P05370](#)

Cytogenetics: Xq37
MW: 59.4 kDa
Gene Summary: catalyzes the first rate-limiting step in the pentose phosphate pathway; may mediate peroxynitrite functions in neuroprotection against nitric oxide-mediated apoptosis [RGD, Feb 2006]

Product images:



Circular map for RR212866