

Product datasheet for **RG205937**

PDK2 (NM_002611) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDK2 (NM_002611) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDK2
Synonyms:	PDHK2; PDKII
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG205937 representing NM_002611 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCGCTGGGTGTGGGCGCTGCTGAAGAATGCGTCCCTGGCAGGGGCGCCCAAGTACATAGAGCACTTCA
GCAAGTCTCCCCGTCCCCGCTGCCATGAAGCAGTTTCTGGACTTCGGATCCAGCAATGCCTGTGAGAA
AACCTCCTTCACCTTCTCAGGCAGGAGCTGCCTGTGCGCCTGGCCAACATCATGAAAGAGATCAACCTG
CTTCCCGACCGAGTGCTGAGCACACCCTCCGTGCAGCTGGTGCAGAGCTGGTATGTCCAGAGCCTCTGG
ACATCATGGAGTTCCTGGACAAGGATCCCGAGGACCATCGCACCTGAGCCAGTTCAGTACGCCCTGGT
CACCATCCGGAACCGGCACAACGACGTGGTGGCCACCATGGCACAAGGCGTGTGTTGAGTACAAGGACACC
TACGGCGATGACCCCGTCTCCAACCAGAACATCCAGTACTTCTGGACCGCTTCTACCTCAGCCGCATCT
CCATCCGCATGCTCATCAACCAGCACACCCTCATCTTTGATGGCAGCACCAACCCAGCCCATCCCAAACA
CATCGGCAGCATCGACCCCAACTGCAACGTCTCTGAGGTGGTCAAAGATGCCTACGACATGGCTAAGCTC
CTGTGTGACAAGTATTACATGGCCTCACCTGACCTGGAGATCCAGGAGATCAATGCAGCCAACTCCAAAC
AGCCGATTCACATGGTCTACGTCCCCTCCCACCTTACCACATGCTCTTTGAGCTCTTCAAGAATGCCAT
GAGGGCGACTGTGAAAGCCATGAGTCCAGCCTCATTCTCCACCCATCAAGGTCATGGTGGCCTTGGGT
GAGGAAGATCTGCCATCAAGATGAGTGACCGAGGTGGGGTGTCCCTTGAGGAAGATTGAGCGACTCT
TCAGTACATGTACTCCACAGCACCCACCCCGCCTGGCAGCCGGGGAAACGCCGCTGGCTGGCTTTGG
TTATGGGCTCCCCATTTCCCGCCTCTACGCCAAGTACTTCCAGGGAGACCTGCAGCTCTTCTCCATGGAA
GGCTTTGGGACCGATGCTGTCATCTATCTCAAGGCCCTGTCCACGGACTCGGTGGAGCGCCTGCCTGTCT
ACAACAAGTCAGCCTGGCGCCACTACCAGACCATCCAGGAGCGCGGACTGGTGTGTGCCAGCACGGGA
GCCCAAGAACACGTCCACGTACCGCTCAGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG205937 representing NM_002611
 Red=Cloning site Green=Tags(s)

MRVWVALLKNASLAGAPKYIEHFSKFSPLSMKQFLDFGSSNACEKTSFTFLRQELPVRLANIMKEINL
 LPDRVLSTPSVQLVQSWYVQSLLDIMEFLDKDPEDHRTL SQFTDALVTIRNRHNDVVPTMAQGVLEYKDT
 YGDDPVSNQNIQYFLDRFYLSRISIRMLINQHTLIFDGSTNPAHPKHIGSIDPNCNVSEVVKDAYDMAKL
 LCDKYMASPDLEIQEINAANSKQPIHMVYVPSHLYHMLFELFKNAMRATVESHESSLILPPIKVMVALG
 EEDLSIKMSDRGGVPLRKIERLFSYMYSTAPTPOPGTGGTPLAGFGYGLPISRLYAKYFQGLQLFSME
 GFGTDAVIYKALSTDSVERLPVYNKSAWRHYQTIQEAGDWCVPSTEPKNTSTYRVS

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_002611

ORF Size: 1221 bp

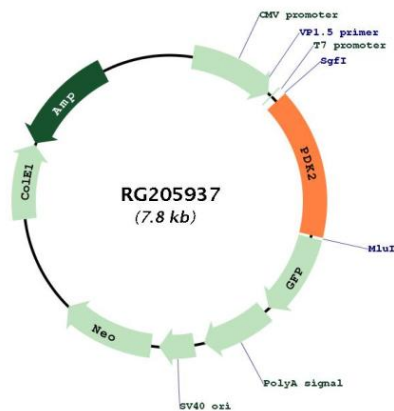
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_002611.5](#)
- RefSeq Size:** 2319 bp
- RefSeq ORF:** 1224 bp
- Locus ID:** 5164
- UniProt ID:** [Q15119](#)
- Cytogenetics:** 17q21.33
- Domains:** HATPase_c
- Protein Families:** Druggable Genome, Protein Kinase
- Gene Summary:** This gene encodes a member of the pyruvate dehydrogenase kinase family. The encoded protein phosphorylates pyruvate dehydrogenase, down-regulating the activity of the mitochondrial pyruvate dehydrogenase complex. Overexpression of this gene may play a role in both cancer and diabetes. Alternatively spliced transcript variants encoding multiple isoforms have been observed for this gene. [provided by RefSeq, Dec 2010]

Product images:



Circular map for RG205937