

Product datasheet for **RG222354**

PDX1 (NM_000209) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PDX1 (NM_000209) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PDX1
Synonyms:	GSF; IDX-1; IPF1; IUF1; MODY4; PAGEN1; PDX-1; STF-1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG222354 representing NM_000209 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAACGGCGAGGAGCAGTACTACGCGGCCACGCAGCTTTACAAGGACCCATGCGCGTTCAGCGAGGCC
CGGCGCCGGAGTTCAGCGCCAGCCCCCTGCGTGCCTGTACATGGGCCGCCAGCCCCGCCGCCGCCGCGC
GCACCCGTTCCCTGGCGCCCTGGCGCGCTGGAGCAGGGCAGCCCCGGACATCTCCCCGTACGAGGTG
CCCCCCTCGCCGACGACCCCGGTGGCGCACCTTACCACCACCTCCCGGCTCAGCTCGCGCTCCCC
ACCCGCCCGCCGGCCCTTCCCGAGGGAGCCGAGCCGGCGTCTGGAGGAGCCCAACCGCTCCAGCT
GCCTTTCCCATGGATGAAGTCTACCAAAGCTCACGCGTGAAAGGCCAGTGGGCAGGCGGCCTACGCT
GCGGAGCCGAGGAGAACAAGCGGACGCGCACGGCTACACGCGCGCACAGCTGCTAGAGCTGGAGAAGG
AGTTCTATTCAACAAGTACATCTACGCGCCGCGCGGTGGAGCTGGTGTGATGTTGAACTTGACCGA
GAGACACATCAAGATCTGGTTCCAAAACCGCCGATGAAGTGGAAAAAGGAGGAGACAAGAAGCGCGGC
GGCGGGACAGCTGTGGGGGTGGCGGGTCCGGAGCCTGAGCAGGACTGCGCCGTGACCTCCGGCGAGG
AGCTTCTGGCGTGC CGCCGCGCCGCCGCCCGGGAGGTGCTGTGCCGCCCGCTGCCCCGTTGCCGCCG
AGAGGGCCGCTGCCGCTGGCCTTAGCGCGTCCGACAGCCCTCCAGCGTCCGCGCTCGCGGCCGCGAG
GAACCACGA

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG222354 representing NM_000209
 Red=Cloning site Green=Tags(s)

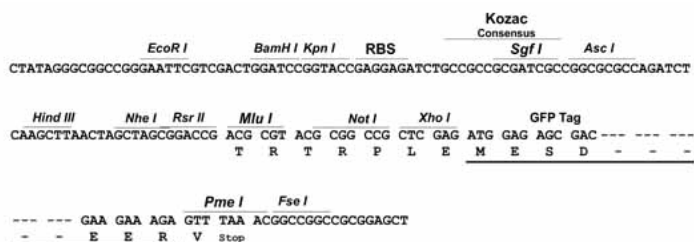
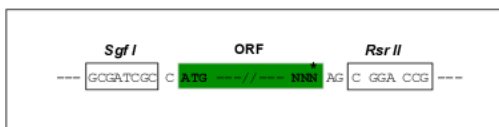
MNGEEQYYAATQLYKDFCAFQRPAPFASAPPAFLYMGRRPPPPPPHPFPGALGALGAEQGSPPDISPYEV
 PPLADDPVAHLHHHLPALQALPHPPAGPFPEGAEPGVLEENRVLQFPFWMKSTKAHAWKGQWAGGAYA
 AEPEENKRTRTAYTRAQLLELEKEFLFNKYISRPRRVELAVMLNLTERHIKIWFQNRMRKWKKEEDKKRG
 GGTAVGGGGVAEPEQDCAVTSGEELLALPPPPPGGAVPPAAPVAAREGLRPPGLSASPQSSVAPRRPQ
 EPR

SGPTRRRLE - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_000209

ORF Size: 849 bp

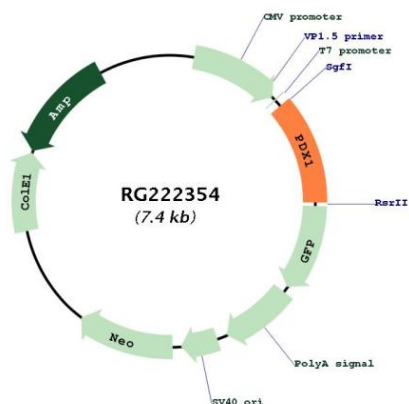
OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA 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:	<ol style="list-style-type: none">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_000209.4
RefSeq Size:	1525 bp
RefSeq ORF:	852 bp
Locus ID:	3651
UniProt ID:	P52945
Cytogenetics:	13q12.2
Protein Families:	Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription Factors
Protein Pathways:	Maturity onset diabetes of the young, Type II diabetes mellitus
Gene Summary:	The protein encoded by this gene is a transcriptional activator of several genes, including insulin, somatostatin, glucokinase, islet amyloid polypeptide, and glucose transporter type 2. The encoded nuclear protein is involved in the early development of the pancreas and plays a major role in glucose-dependent regulation of insulin gene expression. Defects in this gene are a cause of pancreatic agenesis, which can lead to early-onset insulin-dependent diabetes mellitus (IDDM), as well as maturity onset diabetes of the young type 4 (MODY4). [provided by RefSeq, Aug 2017]

Product images:



Circular map for RG222354