

### **Product datasheet for RC222354L2**

# PDX1 (NM\_000209) Human Tagged Lenti ORF Clone

#### **Product data:**

**Product Type:** Expression Plasmids

Product Name: PDX1 (NM\_000209) Human Tagged Lenti ORF Clone

Tag: mGFP Symbol: PDX1

Synonyms: GSF; IDX-1; IPF1; IUF1; MODY4; PAGEN1; PDX-1; STF-1

Mammalian Cell None

Selection:

Vector: pLenti-C-mGFP (PS100071)

E. coli Selection: Chloramphenicol (34 ug/mL)

ORF Nucleotide

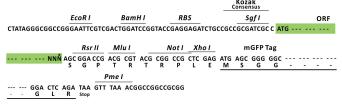
The ORF insert of this clone is exactly the same as(RC222354).

Sequence:

**Restriction Sites:** Sgfl-Rsrll

Cloning Scheme:





<sup>\*</sup> The last codon before the Stop codon of the ORF.

ACCN: NM\_000209

ORF Size: 849 bp



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**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.

NM 000209.1 RefSeq:

RefSeq Size: 1525 bp RefSeq ORF: 852 bp Locus ID: 3651 **UniProt ID:** P52945 Cytogenetics:

**Protein Families:** Embryonic stem cells, ES Cell Differentiation/IPS, Induced pluripotent stem cells, Transcription

13q12.2

Maturity onset diabetes of the young, Type II diabetes mellitus **Protein Pathways:** 

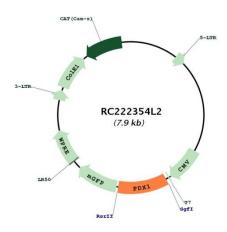
MW: 30.6 kDa



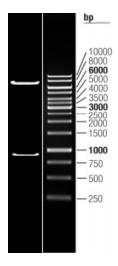
#### **Gene Summary:**

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 RC222354L2



Double digestion of RC222354L2 using Sgfl and Perll