

Product datasheet for RR215611

Pdx1 (NM_022852) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Pdx1 (NM_022852) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Pdx1
Synonyms:	Idx1; Ipf1; Stf1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RR215611 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAAACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGAATAGTGAGGAGCAGTACTACGCGGCCACACAGCTCTACAAGGACCCGTGCGCATTCCAGAGGGGTC
CGGTGCCAGAGTTCAGTGCTAATCCCCCTGCGTGCCTGTACATGGGCCGCCAGCCCCACCTCCGCCGAC
ACCCAGTTTGCAGGCTCGCTGGGAACGCTGGAACAGGGAAGTCCCCGGACATCTCCCATAACGAAGTG
CCCCCGCTCGCCGATGACCCGGCTGGCGGCACCTCCACCACCACCTCCCAGCTCAGCTCGGGCTCGCC
ATCCACCTCCCGACCTTCCCGAATGGAACCGAGACTGGGGCCTGGAAGAGCCAGCCGCGTTTCATCT
CCCTTTCCCGTGGATGAAATCCACCAAAGCTCACGCGTGGAAAAGCCAGTGGGCAGGAGGTGCATACGCA
GCAGAACC GGAGGAGAATAAGAGGACCCGTACAGCCTACACTCGGGCCAGCTGCTGGAGCTGGAGAAGG
AATTCTTATTTAAACAATACATCTCCCGCCTCGCCGGGTGGAGCTGGCAGTGTCTCAACTTGACTGA
GAGACACATCAAATCTGGTTCCAAAACCGTCGCATGAAGTGGAAAGAGGAAGATAAGAAACGTAGT
AGCGGGACAACGAGCGGGGGCGGTGGGGGCGAAGAGCCGGAGCAGGATTGTGCCGTAACCTCGGGCAGG
AGCTGCTGGCATTGCCAAAGCCACCACCTCCCGGAGGTGTTGTGCCCTCAGGCGTCCCTGCTGCTGCCG
GGAGGGCCGACTGCCTCCGGCCTTAGTGCGTCCCCACAGCCCTCCAGCATCGCGCCACTGCGACCCGAG
GAACCCGG

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC
TGGATTACAAGGATGACGACGATAAGGTTAA



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Protein Sequence: >RR215611 protein sequence
Red=Cloning site Green=Tags(s)

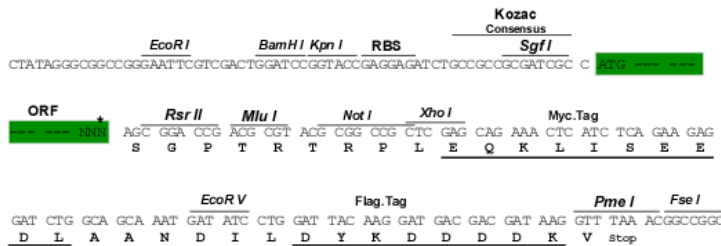
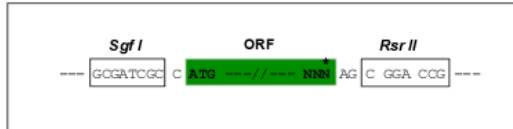
MNSEEQYYAATQLYKDPCAFQRGVPVEFSANPPACL YMGRQPPPPPTPQFAGSLGTL EQGSPDISPYEV
 PPLADDPAGAHLHHHLPAQLGLAHPGPF PNGTETGGLEEPSRVHL PFPWMKSTKAHAWKSQWAGGAYA
 AEPEENKRTRTAYTRAQLLELEKEFLFNKYISRPRRVELAVMLNL TERHIKIWFQNRMRKWKKEEDKKRS
 SGTTSGGGGGEEPEQDCAVTSGEELLALPKPPP GGVVPSGVPAAAREGRLPSGLSASPQPSIAPLRPQ
 EPR

SGPTRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_022852

ORF Size: 849 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_022852.3](#), [NP_074043.3](#)

RefSeq Size: 1403 bp

RefSeq ORF: 852 bp

Locus ID: 29535

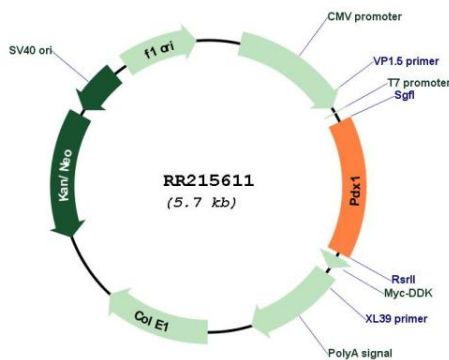
UniProt ID: [P52947](#)

Cytogenetics: 12p11

MW: 30.9 kDa

Gene Summary: Activates insulin and somatostatin gene transcription. Key regulator of islet peptide hormone expression but also responsible for the development of the pancreas, most probably by determining maturation and differentiation of common pancreatic precursor cells in the developing gut. As part of a PDX1:PBX1b:MEIS2b complex in pancreatic acinar cells is involved in the transcriptional activation of the ELA1 enhancer; the complex binds to the enhancer B element and cooperates with the transcription factor 1 complex (PTF1) bound to the enhancer A element. Binds the DNA sequence 5'-CC[CT]TAATGGG-3'. [UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RR215611