

Product datasheet for RC221496

PTF1A (NM_178161) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	PTF1A
Synonyms:	bHLHa29; p48; PACA; PAGEN2; PTF1-p48
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC221496 representing NM_178161 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGACGCGGTGTTGCTGGAGCACTTCCCCGGGGCCTAGACGCCTTTCCTTCTCGTACTTCGACGAGG
 ACGACTTCTTACCGACCACTCTTACGGGACCCCTGGAGGACGGCGATGAGCTGCTGGCGGACGAGCA
 GGCCGAGGTGGAGTTCCTTAGCCACCACTCCACGAGTACTGCTACCGCGACGGGGCGTGCCTGCTGCTG
 CAGCCCGCGCCCCGGCCGCCCTAGCGCTCGCCCCGCCGCTCCTCGGGGGCCTCGGTGAGCCAGACG
 ACGCGGCGCGCGCGGCTACTGCTGCGAGACGGGGCGCCCCAGGCGGCTTCCCTACTCGCCCCGCTC
 GCGGCCCTCGTGCCTGGCCTACCGTGCGCCGGGGCGGCAGTACTGTCTCCCGGGGCGCGGCTGCGCGGC
 CTGAGCGGAGCGCGGCTGCGGCGGCGCGCGCGCGGCGGCGGCTGCGCTCCGAGGCGGAGCTGCAGCAGC
 TGCGGCAGGCGGCCAACGTGCGCGAGCGGCGGCGCATGCAGTCCATCAACGACGCCTTCGAGGGGCTGCG
 CTCGCACATCCCCACGCTGCCCTACGAGAAGCGCCTCTCCAAGGTGGACACGCTGCGCCTGGCCATCGGC
 TACATCAACTTCTCAGCGAGCTCGTGCAGGCCGACCTGCCCTTGCGGCGGCTGGCGGGGCGGCTGCG
 GGGGGCGGGCGGCGGCGGCGGCTGGGCGGGGACAGCCGGGCGAGCCAGGCCAGAAAGTTCATCATCTG
 CCATCGGGGACCCGGTCCCCCTCCCCAGCGACCCTGATTATGGCTCCCTCCCTAGCAGGACACTCT
 CTCTCATGGAAGTATGAAAAAACTCAAGGAACAAAATATTATCCGAACGCCAAAGTCTGGACCCAG
 AGGACCCAGAAAACCTCAACAGCAAATCTTCTTCAACAACATAGAAAACGAACCACCATTTGAGTTGT
 GTCC

ACGCGTACGCGGCGGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA


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Protein Sequence: >RC221496 representing NM_178161
 Red=Cloning site Green=Tags(s)

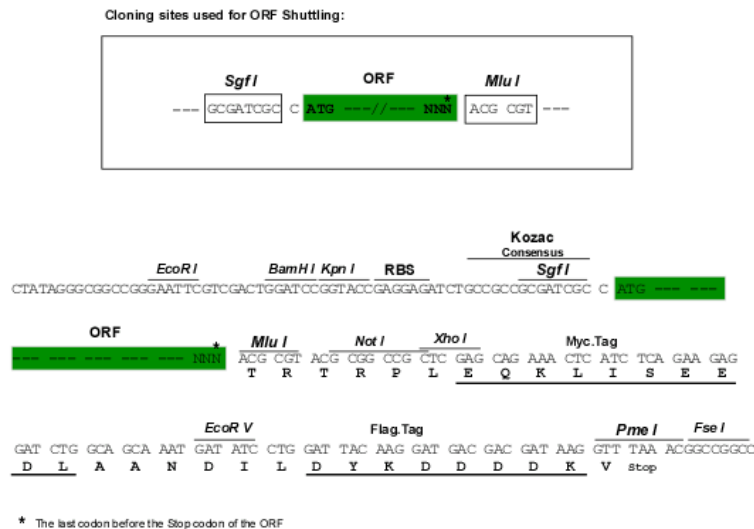
MDAVLLEHFPGGGLDAFPSSYFDEDDFFTDQSSRDPLEDGDELLADEQAEVEFLSHQLHEYCYRDGACLLL
 QPAPPAAPLALAPPSSGGLGEPDDGGGGGYCCETGAPPGGFPYSPGSPPSCLAYPCAGAAVLSPGARLRG
 LSGAAAAAARRRRVRSEAELQQLRQAANVRERRRMSINDAFEGLRSHIPTLPYEKRLSKVDTLRLAIG
 YINFLSELVQADLPLRGGGAGGCGPGGGGRLGGDSPGSQAQKVIICHRGTRSPSPSDPDYGLPPLAGHS
 LSWTDEKQLKEQNIIRTAKVWTPEDPRKLNKSSFNNIENEPPEFVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mg2944_b09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_178161

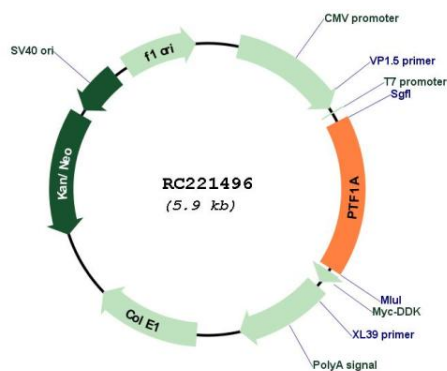
ORF Size: 984 bp

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.

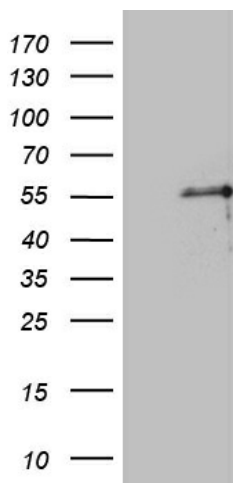
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_178161.3
RefSeq Size:	987 bp
RefSeq ORF:	987 bp
Locus ID:	256297
UniProt ID:	Q7RTS3
Cytogenetics:	10p12.2
Protein Families:	Embryonic stem cells, ES Cell Differentiation/IPS
MW:	34.8 kDa
Gene Summary:	This gene encodes a protein that is a component of the pancreas transcription factor 1 complex (PTF1) and is known to have a role in mammalian pancreatic development. The protein plays a role in determining whether cells allocated to the pancreatic buds continue towards pancreatic organogenesis or revert back to duodenal fates. The protein is thought to be involved in the maintenance of exocrine pancreas-specific gene expression including elastase 1 and amylase. Mutations in this gene cause cerebellar agenesis and loss of expression is seen in ductal type pancreas cancers. [provided by RefSeq, Jul 2008]

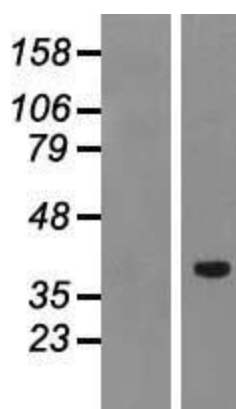
Product images:



Circular map for RC221496



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY PTF1A (Cat# RC221496, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-PTF1A (Cat# [TA810965])(1:2000). Positive lysates [LY406006] (100ug) and [LC406006] (20ug) can be purchased separately from OriGene.



Western blot validation of overexpression lysate (Cat# [LY406006]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221496 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).