

## Product datasheet for **RG221496**

### PTF1A (NM\_178161) Human Tagged ORF Clone

#### Product data:

**Product Type:** Expression Plasmids  
**Product Name:** PTF1A (NM\_178161) Human Tagged ORF Clone  
**Tag:** TurboGFP  
**Symbol:** PTF1A  
**Synonyms:** bHLHa29; p48; PACA; PAGEN2; PTF1-p48  
**Mammalian Cell Selection:** Neomycin  
**Vector:** pCMV6-AC-GFP (PS100010)  
**E. coli Selection:** Ampicillin (100 ug/mL)  
**ORF Nucleotide Sequence:** >RG221496 representing NM\_178161  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGACGCGGTGTTGCTGGAGCACTTCCCCGGGGCCTAGACGCCTTTCCTTCTCGTACTTCGACGAGG  
 ACGACTTCTTACCGACCAGTCTTACGGGACCCCTGGAGGACGGCGATGAGCTGCTGGCGGACGAGCA  
 GGCCGAGGTGGAGTTCCTTAGCCACCAGCTCCACGAGTACTGCTACCGGACGGGGCGTGCCTGCTGCTG  
 CAGCCCGCGCCCCGGCCGCCCGCTAGCGCTCGCCCCGCGTCTCGGGGGCCTCGGTGAGCCAGACG  
 ACGGCGGGCGGGCGGCTACTGCTGCGAGACGGGGCGCCCCAGGCGGCTTCCCCTACTCGCCCGGCTC  
 GCCGCCCTCGTGCCTGGCTACCCGTGCGCCGGGGCGGCAGTACTGTCTCCCGGGGCGCGGCTGCGCGGC  
 CTGAGCGGAGCGGCGGCTGCGGGCGGCGGCGCCGGCGGGTGCCTCCGAGGCGGAGCTGCAGCAGC  
 TGCGGCAGGCGGCAACGTGCGCGAGCGGCGGCGCATGCAGTCCATCAACGACGCCTTCGAGGGGCTGCG  
 CTCGCACATCCCCACGCTGCCCTACGAGAAGCGCCTCTCCAAGGTGGACACGCTGCGCCTGGCCATCGGC  
 TACATCAACTTCTCAGCGAGCTCGTGCAGGCCGACCTGCCCTTGCGCGGCGGTGGCGGGGCGGCTGCG  
 GGGGGCCGGCGGCGGGCGCCTGGGCGGGACAGCCGGGACGCCAGGCCAGAAGTTCATCATCTG  
 CCATCGGGGACCCCGTCCCCCTCCCCAGCGACCCTGATTATGGCTCCCTCCCTAGCAGGACTCT  
 CTCTCATGGACTGATGAAAAAACTCAAGGAACAAAATTATCCGAACAGCCAAGTCTGGACCCAG  
 AGGACCCAGAAAACTCAACAGCAAATCTTCTTCAACAACATAGAAAACGAACCACCATTTGAGTTTGT  
 GTCC

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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**Protein Sequence:** >RG221496 representing NM\_178161  
Red=Cloning site Green=Tags(s)

MDAVLLEHFPGGLDAFPSSYFDEDDFFTDQSSRDPLEDGEDLLADEQAEVEFLSHQLHEYCYRDGACLLL  
 QPAPPAAPLALAPPSSGGLGEPDDGGGGGYCCETGAPPGGFPYSPGSPPSCLAYPCAGAAVLSPGARLRG  
 LSGAAAAARRRRRVRSEAELQQLRQAANVRERRRMSINDAFEGLRSHIPTLPYEKRLSKVDTLRLAIG  
 YINFLSELVQADLPLRGGGAGCGGPGGGGRLGGDSPGSQAQKVIICHRGTRSPSPDPDYGLPPLAGHS  
 LSWTDEKQLKEQNIIRTAKVWTPEDPRKLNKSSFNNIENEPPEFVVS

TRTRPLE - GFP Tag - V

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**



**ACCN:** NM\_178161

**ORF Size:** 984 bp

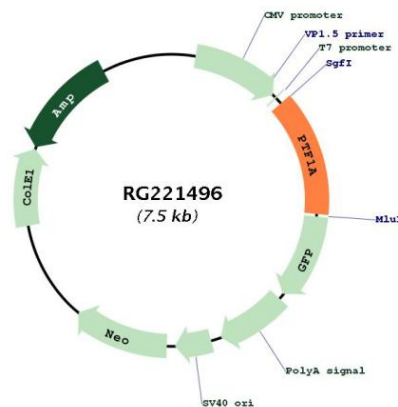
**OTI Disclaimer:** Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of 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](mailto: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.

<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<u>NM_178161.3</u>
<b>RefSeq Size:</b>	987 bp
<b>RefSeq ORF:</b>	987 bp
<b>Locus ID:</b>	256297
<b>UniProt ID:</b>	<u>Q7RTS3</u>
<b>Cytogenetics:</b>	10p12.2
<b>Protein Families:</b>	Embryonic stem cells, ES Cell Differentiation/IPS
<b>Gene Summary:</b>	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 RG221496