

Product datasheet for **RG207663**

PAOX (NM_152911) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	TurboGFP
Symbol:	PAOX
Synonyms:	PAO
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



ORF Nucleotide Sequence: >RG207663 representing NM_152911
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCGCGATCGCC

ATGGAGTCGACCGGCAGCGTCGGGGAGGCCCGGGCGGACCCGGGTGCTGGTGGTGGGCGGCGCATCG
 CGGGGCTGGGCGCGGCGCAGAGGCTCTGCGGCCACTCCGCCTTCCCGCACCTGCGGGTCCTGGAGGCCAC
 GGCCCGCGCGGGGGCGCATCCGCTCGGAGCGCTGCTTCGGTGGCGTGGTGGAGGTGGGCGCGCACTGG
 ATCCATGGGCCCCCGGGGTAACCCCGTCTTCCAGCTGGCTGCTGAGTACGGGCTGCTGGGGGAGAAGG
 AGCTGTCCCAGGAGAACCAGCTGGTGGAGACCGGGGTCAGTGGGCTGCCCTCCGTGAGCTACGCCAG
 CTCCGGGGCCAGCGTGAGCCTCCAGCTGGTGGCGGAGATGGCGACTCTGTTCTACGGCCTGATAGACCAG
 ACCCGGGAGTTCTGACGCTGCAGAGACCCGGTGCCAGCGTCGGGGAGTACCTCAAGAAGGAGATTG
 GCCAGCAGTGGCCGGCTGGACAGAGGATGAGGAGACCAGGAAGCTGAAGCTGGCCGCTCCTGAACCTCTT
 CTTCAACCTGGAATGCTGTGTGAGCGGCACCCACAGCATGGACCTGGTGGCCCTGGCACCCCTTTGGGGAG
 TATACGCTGCTGCCGGGCTGGACTGCACCTTTTCTAAGGGCTATCAAGGACTCACAACTGCATGATGG
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 TGCCGGCTGAGAAGGCAGAAGCAATCAGGAAGATAGGCTTTGGGACCAACAACAAAATCTTCTGGAGTT
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 GATGCTGCCCTGAGCTACAGGACGCTGGTTCGGAAGCTCATTGGCTTTGTGGTCTGCTGCCTTTG
 CGTCTGTCCACGTTCTCTGTGGTTTATTGCCGACTTGAGTCTGAGTTCATGGAGACTCTGTGGATGA
 AGAAGTACTTCTGTGTCTACCCAAGTGCTCCGGAGAGTGACAGGAAACCCACGGCTCCCCGCGCCCAAG
 AGCGTCTGCGGTCTCGTGGCACAGCGCCCCGTACACTAGGGGGTCTACAGCTACGTGGCCGTGGGCA
 GTACTGGGGGCGACCTGGACCTGCTGGCTCAGCCCTCCCTGCAGACGGCGCGCGCCAGCTCCAGAT
 CCTGTTTGGGGGAAGCCACATCGACGTTTTACTCCAGCAGCAGGGGCTCTGCTGTGGGATGG
 AGGGAGGCCGACCGCTCCTCAGTCTGTGGGCCCGCAGGTGCAGCAGCCAGGCCAGGCTC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

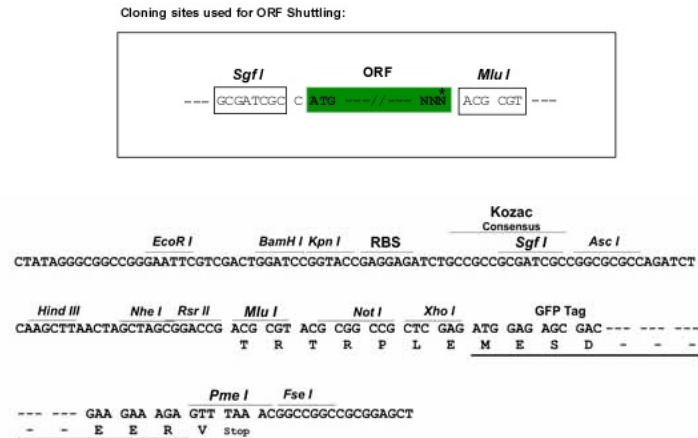
Protein Sequence: >RG207663 representing NM_152911
 Red=Cloning site Green=Tags(s)

MESTGSVGEAPGGPRVLVVGGLIAGLGAAQRLCGHSAFPHLRVLEATARAGGRIRSERCFGGVVEVGAHW
 IHGPSRGNPVFQLAAEYGLLGEKELSQENQLVETGGHVGLPSVSYASSGASVSLQLVAEMATLFYGLIDQ
 TREFLHAAETPVPSVGEYLKKEIGQHVAGWTEDEETRLKLAVLNSFFNLECCVSGTHSMDLVALAPFGE
 YTVLPGLDCTFSKGYQGLTNCMAALPEDTVVFEKPVKTIHWNGSFQEAAPGETFPVSVECEDGDRFPA
 HHVIVTVPLGLREHLDTFFDPPLPAEKAEAIRKIGFGTNNKIFLEFEFPFWEPCQLIQLVWEDTSPL
 DAAPELQDAWFRKLIGFVVLPAFASVHVLGFIAGLESEFMETLSDEEVLLCLTQVLRRTGNPRLPAPK
 SVLRSRWSAPYTRGSYSYVAVGSGGDLDLAQPLPADGAGALQILFAGEATHRTFYSTTHGALLSGW
 READRLLSLWAPVQVQPRPRL

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_152911

ORF Size: 1533 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.

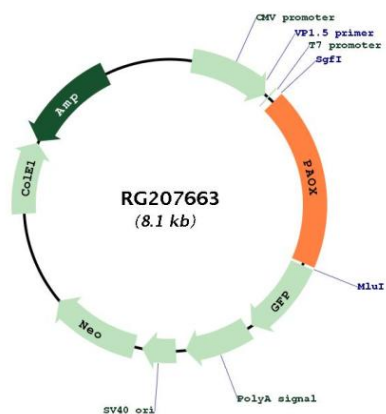
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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:	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:	<u>NM_152911.4</u>
RefSeq Size:	1878 bp
RefSeq ORF:	1536 bp
Locus ID:	196743
UniProt ID:	<u>Q6QHF9</u>
Cytogenetics:	10q26.3
Protein Families:	Druggable Genome
Gene Summary:	Flavoenzyme which catalyzes the oxidation of N(1)-acetylspermine to spermidine and is thus involved in the polyamine back-conversion (PubMed:12477380). Can also oxidize N(1)-acetylspermidine to putrescine. Substrate specificity: N(1)-acetylspermine = N(1)-acetylspermidine > N(1),N(12)-diacetylspermine >> spermine. Does not oxidize spermidine. Plays an important role in the regulation of polyamine intracellular concentration and has the potential to act as a determinant of cellular sensitivity to the antitumor polyamine analogs (PubMed:12477380).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RG207663