

Product datasheet for **RC224235**

PAOX (NM_207128) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PAOX (NM_207128) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PAOX
Synonyms:	PAO
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

ORF Nucleotide Sequence:

>RC224235 representing NM_207128
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGC**

ATGGAGTCGACCGCAGCGTCGGGGAGGCCCGGGCGGACCCGGGTGCTGGTGGTGGGCGCGGCATCG
 CGGGGCTGGGCGCGCGCAGAGGCTCTGCGGCCACTCCGCCTCCCGCACCTGCGGGTCTGGAGGCCAC
 GGCCCGCGCGGGGGCCGCATCCGCTCGGAGCGCTGCTTCGGTGGCGTGGTGGAGGTGGGCGCGCACTGG
 ATCCATGGGCCCTCCCGGGTAACCCCGTCTTCAGCTGGCTGCTGAGTACGGGCTGCTGGGGGAGAAGG
 AGCTGTCCAGGAGAACCAGCTGGTGGAGACGGGGGTACGTGGGCTGCCCTCCGTGAGCTACGCCAG
 CTCCGGGGCCAGCGTGAGCCTCCAGCTGGTGGCGGAGATGGCGACTCTGTTCTACGGCTGATAGACCAG
 ACCCGGGAGTTCTGCACGTGCAGAGACCCCGGTGCCAGCGTCGGGGAGTACCTCAAGAAGGAGATTG
 GCCAGCACGTGGCCGGCTGGACAGAGGATGAGGAGACCAGGAAGCTGAAGCTGGCCGTCTGAACCTCTT
 CTTCAACCTGGAATGCTGTGTGAGCGGCACCCACAGCATGGACCTGGTGGCCCTGGCACCTTTGGGGAG
 TATACCGTGTGCGGGGCTGGACTGCACCTTTTCTAAGGGCTATCAAGGACTCACAAACTGCATGATGG
 CCGCCCTGCCGGAGGACACTGTAGTTTTGAGAAGCCTGTGAAGACCATCCACTGGAACGGTCTTCCA
 GGAGGCAGCCTTTCCCGGGAGACCTTTCCAGTGTGCGTAGAGTGTGAGGATGGAGACCGGTTCCCGGCG
 CACCATGTGTCATCGTCACCGTGCCCTTAGGTTTTCTTAGGGAACATTTGGACACCTTCTTTGACCTCCCC
 TGCCGGCTGAGAAGGCAGAAGCAATCAGGAAGTAGGCTTTGGGACCAACAACAAATCTTCTGGAGTT
 TGAGGAGCCCTTCTGGGAGCCAGACTGCCAGCTGATCCAGCTGGTGTGGGAGGACACGTCGCCCTGGAG
 GATGCTGCCCCGAGCTACAGGACGCTGGTTCGGGAAGCTCATTGGCTTTGTGGTCTGCTGCCTTTG
 CGTCTGTCCACGTTCTGTGGTTTATTGCCGACTTGAGTCTGAGTTCATGGAGACTCTGTCCGATGA
 AGAAGTACTTCTGTGTCTACCCAAGTGCTCCGGAGAGTGACAGCTCCAGATCCTGTTTGGCGGGGAAGC
 CACACATCGCACGTTTTACTCCACGACGACGGGGCTCTGCTGTGCGGATGGAGGAGGCCGACCGCCTC
 CTCAGTCTGTGGGCCCCGAGGTGCAGCAGCCAGGCCAGGCTCTAGCTGGGCCAGCCTACTCTGTTC
 CACCCGTGTGGGGGTAGGCTGGGACCCTATTCTTCTGACAGATTTAGTCTGGCT

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC224235 representing NM_207128
 Red=Cloning site Green=Tags(s)

MESTGSVGEAPGGPRVLVVGGLIAGLGAAQRLCGHSAPHLRVLEATARAGGRIRSERCFGGVVEVGAHW
 IHGPSRGNPVFQLAAEYGLLGEKELSQENQLVETGGHVGLPSVSYASSGASVSLQLVAEMATLFYGLIDQ
 TREFLHAAETPVPSVGEYLKKEIGQHVAGWTEDEETRLKLAVLNSFFNLECCVSGTHSMDLVALAPFGE
 YTVLPGLDCTFSKGYQGLTNCMAALPEDTVVFEKPVKTIHWNGSFQEAAPGETFPVSVCEGDGRFPA
 HHVIVTVPLGFLREHLDTFFDPPLPAEKAEAIRKIGFGTNNKIFLEFEFPWFEPDCQLIQLVWEDTSPL
 DAAPQLQDAWFRKLIGFVVLPAFASVHVLGCFIAGLESEFMETLSDEEVLLCLTQVLRRTAPDPVCGGS
 HTSHVLLHDARGSAVMEGGRPPQSVGPAGAAAQAALAGPSLLCSTRVGRLGPSFLLTDFSLA

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8043_f02.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_207128

ORF Size: 1458 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.

Note: Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.

RefSeq: [NM_207128.3](#)

RefSeq Size: 1720 bp

RefSeq ORF: 1461 bp

Locus ID: 196743

UniProt ID: Q6QHF9

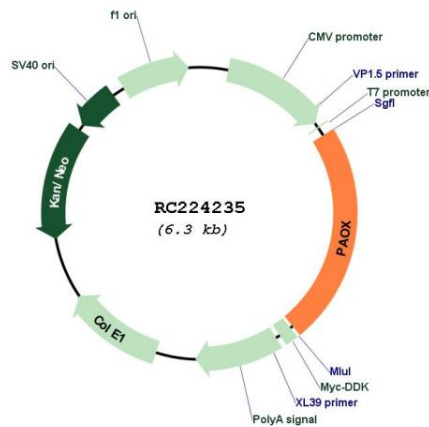
Cytogenetics: 10q26.3

Protein Families: Druggable Genome

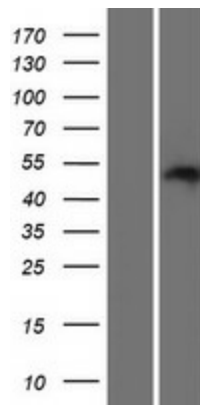
MW: 51.8 kDa

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]

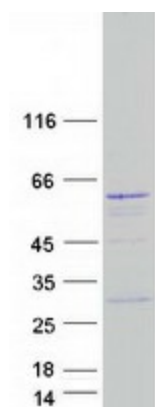
Product images:



Circular map for RC224235



Western blot validation of overexpression lysate (Cat# [LY404058]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224235 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PAX protein (Cat# [TP324235]). The protein was produced from HEK293T cells transfected with PAX cDNA clone (Cat# RC224235) using MegaTran 2.0 (Cat# [TT210002]).