

## Product datasheet for **RC225811**

### **PPOX (NM\_001122764) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	PPOX (NM_001122764) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	PPOX
Synonyms:	PPO; V290M; VP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



[View online »](#)

**ORF Nucleotide Sequence:**

>RC225811 ORF sequence  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGGCCGACCGTGGTCTGCTGGGCGGAGGCATCAGCGGCTTGCCGCCAGTTACCACCTGAGCCGGG  
 CCCCTGCCCCCTAAGGTGGTCTAGTGGAGAGCAGTAGCGTCTGGGAGGCTGGATTCGCTCCGTTCCG  
 AGGCCCTAATGGTGTCTATCTTTGAGCTTGACCTCGGGGAATTAGGCCAGCGGGAGCCCTAGGGGCCGG  
 ACCTTGCTCCTGGTTTCTGAGCTTGGCTTGGATTGAGAAGTGTGCCTGTCCGGGAGACACCCAGCTG  
 CCCAGAACAGGTTCTCTACGTGGGCGGTGCCCTGCATGCCCTACCCACTGGCCTCAGGGGGCTACTCCG  
 CCCTTACCCCTTCTCCAAACCTCTGTTTTGGGCTGGGCTGAGGGAGCTGACCAAGCCCCGGGCAAA  
 GAGCCTGATGAGACTGTGCACAGTTTTGCCAGCGCCGCTTGGACCTGAGGTGGCGTCTTAGCCATGG  
 ACAGTCTCTGCCGTGGAGTGTTCAGGCAACAGCCGTGAGCTCAGCATCAGGTCCTGCTTCCAGTCT  
 CTTCCAAGCTGAGCAAACCCATCGTTCCATATTACTGGGCTGCTGCTGGGGCAGGGCGGACCCACAG  
 CCAGACTCAGCACTCATTGCCAGGCCTTGGCTGAGCGCTGGAGCCAGTGGTCACTTCGTGGAGGCTAG  
 AGATGTTGCCTCAGGCCCTTGAACCCACCTGACTAGTAGGGGGTCAGTGTTCTCAGAGGCCAGCCGGT  
 CTGTGGGCTCAGCCTCCAGGCAGAAGGGCGCTGGAAGGTATCTTAAGGGACAGCAGTCTGGAGGCTGAC  
 CACGTTATTAGTGCCATTCAGCTTCAGTGCTCAGTGAGCTGCTCCCTGCTGAGGCTGCCCTCTGGCTC  
 GTGCCCTGAGTGCCATCACTGCAGTGTCTGTAGCTGTGGTGAATCTGCAGTACCAAGGAGCCCATCTGCC  
 TGTCAGGATTTGGACATTTGGTGCCATCTTCAGAAGATCCAGGAGTCTGGGAATCGTGTATGACTCA  
 GTTGCTTTCCCTGAGCAGGACGGGAGCCCCCTGGCCTCAGAGTACTGTGATGCTGGGAGGTTCTGGT  
 TACAGACTGGAGGCTAGTGGCTGTCTTATCTCAGGAGCTGTTTCAACAGCGGGCCAGGAAGCAGC  
 TGCTACACAATTAGGACTGAAGGAGATGCCGAGCCACTGCTTGGTCCATCTACACAAGAAGTGCATTCCC  
 CAGTATACACTAGGCTCACTGGCAAAAAGTACAGTCAAGTCAAGCAATTCCTGACTGCTCACAGGTTGCCCC  
 TGAAGTCTGGTGGAGCCTCCTATGAGGGAGTTGCTGTTAATGACTGTATAGAGAGTGGGCGCCAGGCAGC  
 AGTCAGTGTCTGGGCACAGAACCTAACAGC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:**

>RC225811 protein sequence  
 Red=Cloning site Green=Tags(s)

MGRTVVVLGGISGLAASYHL SRAPCPPKVVLEVSESLRGGWIRSVRGPNGAIFELGPRGIRPAGALGAR  
 TLLLVLSELDSEVLPVRGDHPAAQNRFLYVGGALHALPTGLRGLLRPSPPF SKPLFWAGLRELTKPRGK  
 EPDETIVHSFAQRRLGPEVASLAMDSL CRGVFAGNSREL SIRSCFPSLFQAEQTHRSILLGLLLGAGRTPQ  
 PDSALIRQALAEERWSQWSLRGGLEMLPQALETHLTSRGVSVLRGQPVCGLSLQAEGRWKVSLRDSLEAD  
 HVISAI PASVLSSELLPAEAAPLARALSAITAVSVAVVNLQYQGAHLPVQGFHGLVPSSDPVGLGIVYDS  
 VAFPEQDGSPPGLRVTVM LGGSWLQTLASGCVLSQELFQQRAQEAAATQLGLKEMPSHCLVHLHKNCIP  
 QYTLGHWQKLESARQFLTAHRLPLTLGASVYEGVAVNDCIESGRQAASVVLGTEPNS

**TR**TRPLEQKLI SEEDLAANDILDYKDDDDKV

**Chromatograms:**

[https://cdn.origene.com/chromatograms/mk6376\\_d10.zip](https://cdn.origene.com/chromatograms/mk6376_d10.zip)

**Restriction Sites:**

Sgfl-MluI

**Cloning Scheme:**


**ACCN:** NM\_001122764

**ORF Size:** 1431 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\\_001122764.3](#)

**RefSeq Size:** 1777 bp

**RefSeq ORF:** 1434 bp

**Locus ID:** 5498

**UniProt ID:** [P50336](#)

**Cytogenetics:** 1q23.3

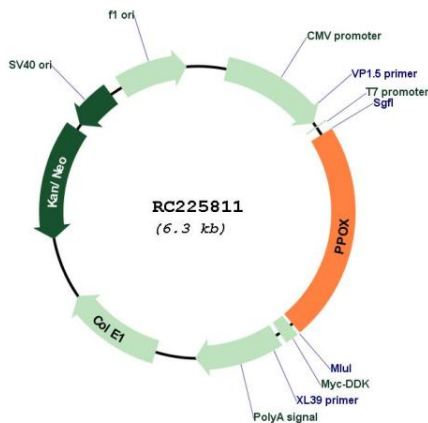
**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Porphyrin and chlorophyll metabolism

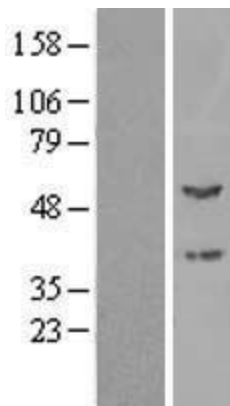
**MW:** 50.8 kDa

**Gene Summary:** This gene encodes the penultimate enzyme of heme biosynthesis, which catalyzes the 6-electron oxidation of protoporphyrinogen IX to form protoporphyrin IX. Mutations in this gene cause variegate porphyria, an autosomal dominant disorder of heme metabolism resulting from a deficiency in protoporphyrinogen oxidase, an enzyme located on the inner mitochondrial membrane. Alternatively spliced transcript variants encoding the same protein have been identified. [provided by RefSeq, Jul 2008]

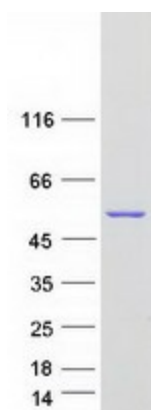
**Product images:**



Circular map for RC225811



Western blot validation of overexpression lysate (Cat# [LY426558]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC225811 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified PPOX protein (Cat# [TP325811]). The protein was produced from HEK293T cells transfected with PPOX cDNA clone (Cat# RC225811) using MegaTran 2.0 (Cat# [TT210002]).