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Product datasheet for RC201788

PPOX (NM_000309) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PPOX (NM_000309) 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:

>RC201788 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGGCCGGACCGTGGTCGTGCTGGGCGGAGGCATCAGCGGCTTGGCCGCCAGTTACCACCTGAGCCGGG
CCCCCTGCCCCCCTAAGGTGGTCCTAGTGGAGAGCAGTGAGCGTCTGGGAGGCTGGATTCGCTCCGTTCG
AGGCCCTAATGGTGCTATCTTTGAGCTTGGACCTCGGGGAATTAGGCCAGCGGGAGCCCTAGGGGCCCGG
ACCTTGCTCCTGGTTTCTGAGCTTGGCTTGGATTCAGAAGTGCTGCCTGTCCGGGGAGACCACCCAGCTG
CCCAGAACAGGTTCCTCTACGTGGGCGGTGCCCTGCATGCCCTACCCACTGGCCTCAGGGGGCTACTCCG
CCCTTCACCCCCCTTCTCCAAACCTCTGTTTTGGGCTGGGCTGAGGGAGCTGACCAAGCCCCGGGGCAAA
GAGCCTGATGAGACTGTGCACAGTTTTGCCCAGCGCCGCCTTGGACCTGAGGTGGCGTCTCTAGCCATGG
ACAGTCTCTGCCGTGGAGTGTTTGCAGGCAACAGCCGTGAGCTCAGCATCAGGTCCTGCTTTCCCAGTCT
CTTCCAAGCTGAGCAAACCCATCGTTCCATATTACTGGGCCTGCTGCTGGGGGCAGGGCGGACCCCACAG
CCAGACTCAGCACTCATTCGCCAGGCCTTGGCTGAGCGCTGGAGCCAGTGGTCACTTCGTGGAGGTCTAG
AGATGTTGCCTCAGGCCCTTGAAACCCACCTGACTAGTAGGGGGGTCAGTGTTCTCAGAGGCCAGCCGGT
CTGTGGGCTCAGCCTCCAGGCAGAAGGGCGCTGGAAGGTATCTCTAAGGGACAGCAGTCTGGAGGCTGAC
CACGTTATTAGTGCCATTCCAGCTTCAGTGCTCAGTGAGCTGCTCCCTGCTGAGGCTGCCCCTCTGGCTC
GTGCCCTGAGTGCCATCACTGCAGTGTCTGTAGCTGTGGTGAATCTGCAGTACCAAGGAGCCCATCTGCC
TGTCCAGGGATTTGGACATTTGGTGCCATCTTCAGAAGATCCAGGAGTCCTGGGAATCGTGTATGACTCA
GTTGCTTTCCCTGAGCAGGACGGGAGCCCCCCTGGCCTCAGAGTGACTGTGATGCTGGGAGGTTCCTGGT
TACAGACACTGGAGGCTAGTGGCTGTGTCTTATCTCAGGAGCTGTTTCAACAGCGGGCCCAGGAAGCAGC
TGCTACACAATTAGGACTGAAGGAGATGCCGAGCCACTGCTTGGTCCATCTACACAAGAACTGCATTCCC
CAGTATACACTAGGTCACTGGCAAAAACTAGAGTCAGCTAGGCAATTCCTGACTGCTCACAGGTTGCCCC
TGACTCTGGCTGGAGCCTCCTATGAGGGAGTTGCTGTTAATGACTGTATAGAGAGTGGGCGCCAGGCAGC
AGTCAGTGTCCTGGGCACAGAACCTAACAGC

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC201788 protein sequence
Red=Cloning site Green=Tags(s)

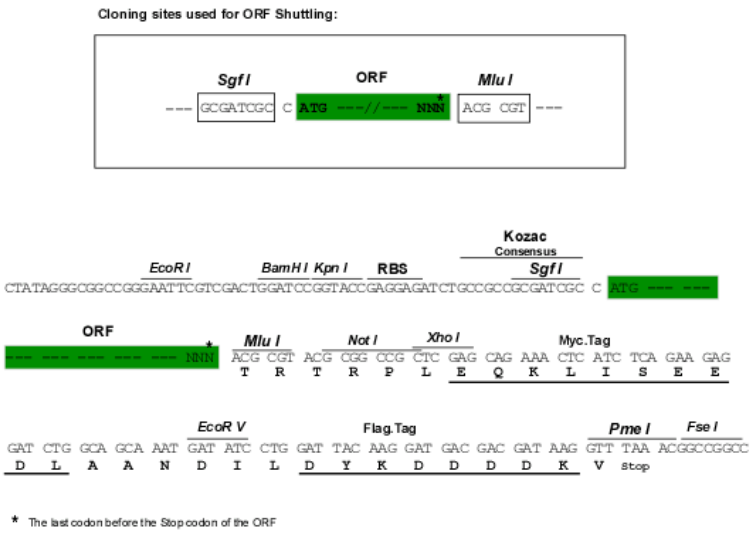
MGRTVVVLGGGISGLAASYHLSRAPCPPKVVLVESSERLGGWIRSVRGPNGAIFELGPRGIRPAGALGAR
TLLLVSELGLDSEVLPVRGDHPAAQNRFLYVGGALHALPTGLRGLLRPSPPFSKPLFWAGLRELTKPRGK
EPDETVHSFAQRRLGPEVASLAMDSLCRGVFAGNSRELSIRSCFPSLFQAEQTHRSILLGLLLGAGRTPQ
PDSALIRQALAERWSQWSLRGGLEMLPQALETHLTSRGVSVLRGQPVCGLSLQAEGRWKVSLRDSSLEAD
HVISAIPASVLSELLPAEAAPLARALSAITAVSVAVVNLQYQGAHLPVQGFGHLVPSSEDPGVLGIVYDS
VAFPEQDGSPPGLRVTVMLGGSWLQTLEASGCVLSQELFQQRAQEAAATQLGLKEMPSHCLVHLHKNCIP
QYTLGHWQKLESARQFLTAHRLPLTLAGASYEGVAVNDCIESGRQAAVSVLGTEPNS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6376_d10.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_000309

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_000309.5

RefSeq Size: 1716 bp

RefSeq ORF: 1434 bp

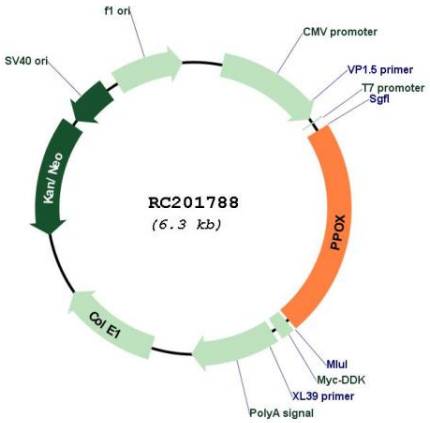
Locus ID: 5498

UniProt ID: P50336

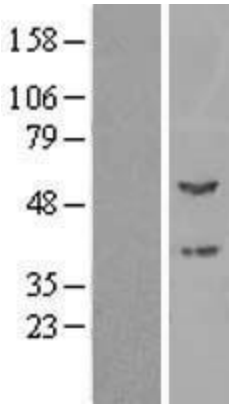
Cytogenetics: 1q23.3

Domains:	Amino_oxidase
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]

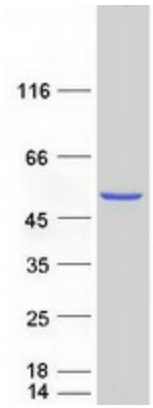
Product images:



Circular map for RC201788



Western blot validation of overexpression lysate (Cat# [LY426558]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected 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# [TP301788]). The protein was produced from HEK293T cells transfected with PPOX cDNA clone (Cat# RC201788) using MegaTran 2.0 (Cat# [TT210002]).