

Product datasheet for **RG200133**

PNPO (NM_018129) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PNPO (NM_018129) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PNPO
Synonyms:	HEL-S-302; PDXPO
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG200133 representing NM_018129 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGACGTGCTGGCTGCGGGCGTCACGGCGACGTTGGGGCAGCTGCCGAGTGGCCAGGCTACCTCAGTC
ACCTGTGTGGTCGCAGTGTGCCATGGACCTGGGACCCATGCGCAAGAGTTACCGCGGGGACCGAGAGGC
ATTTGAGGAGACTCATCTGACCTCTCTTGACCCAGTGAACAGTTTGTGCCTGGTTTGAGGAGGCTGTT
CAGTGTCTGACATAGGGGAAGCCAATGCCATGTGTCTGGCTACCTGCACCAGAGATGGAAAACCTCTG
CTCGCATGTTGCTGCTGAAGGGCTTCGGGAAAGATGGCTTCCGCTTCTTACTAACTTCGAGAGTCGAAA
AGGAAAAGAGCTGGACTCTAATCCCTTTGCTTCCCTTGTCTTCTACTGGGAGCCACTTAACCGTCAGGTG
CGTGTGGAAGGCCCTGTGAAGAACTGCCTGAGGAGGAGGCTGAGTGCTACTTCCACTCCCGCCCAAGA
GCAGCCAGATTGGGGCTGTGGTCAGCCACCAGAGTTCTGTGATCCCTGATCGGGAGTATCTGAGAAAGAA
AAATGAGGAACCTGGAACAGCTCTACCAGGATCAAGAGGTGCCCAAGCCAAAATCCTGGGGTGGCTATGTC
CTGTACCCTCAGGTGATGGAGTTCTGGCAAGGTCAAACCAACCGCTGCATGACCGGATAGTCTTTCCGC
GGGGCTACCCACAGGAGATCCCTTTGGGGCCCATGACCCACCGGGGAGGAAGACTGGCTCTATGA
GAGACTTGACCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >RG200133 representing NM_018129
 Red=Cloning site Green=Tags(s)

MTCWLRGVTATFGRPAEWPGYLSHLCGRSAAMD LGPMRKS YR G D R E A F E E T H L T S L D P V K Q F A A W F E E A V
 Q C P D I G E A N A M C L A T C T R D G K P S A R M L L L K G F G K D G F R F F T N F E S R K G K E L D S N P F A S L V F Y W E P L N R Q V
 R V E G P V K K L P E E E A E C Y F H S R P K S S Q I G A V V S H Q S S V I P D R E Y L R K K N E E L E Q L Y Q D Q E V P K P K S W G G Y V
 L Y P Q V M E F W Q G Q T N R L H D R I V F R R G L P T G D S P L G P M T H R G E E D W L Y E R L A P

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_018129

ORF Size: 783 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_018129.2](#), [NP_060599.1](#)

RefSeq Size: 3437 bp

RefSeq ORF: 786 bp

Locus ID: 55163

UniProt ID: [Q9NVS9](#)

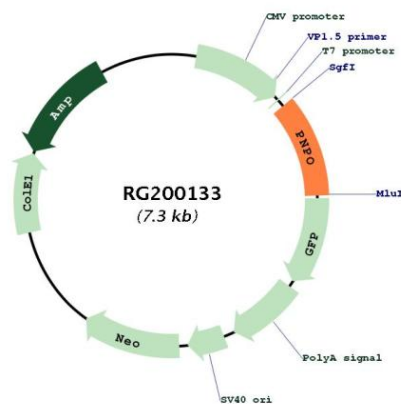
Cytogenetics: 17q21.32

Domains: Pyridox_oxidase

Protein Pathways: Metabolic pathways, Vitamin B6 metabolism

Gene Summary: The enzyme encoded by this gene catalyzes the terminal, rate-limiting step in the synthesis of pyridoxal 5'-phosphate, also known as vitamin B6. Vitamin B6 is a required co-factor for enzymes involved in both homocysteine metabolism and synthesis of neurotransmitters such as catecholamine. Mutations in this gene result in pyridoxamine 5'-phosphate oxidase (PNPO) deficiency, a form of neonatal epileptic encephalopathy. [provided by RefSeq, Oct 2008]

Product images:



Circular map for RG200133