

## Product datasheet for **MR231370**

### Enpp2 (NM\_001285995) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Enpp2 (NM_001285995) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Enpp2
Synonyms:	AT; ATX; Auto; E-NPP 2; lysoPLD; N; Npps2; Pd; PD-; PD-Ialpha; PdnP2
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**ORF Nucleotide Sequence:**

>MR231370 representing NM\_001285995  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCAAGACAAGGCTGTTTCGGGTCATACCAGGTAATATCCTTGTTCACTTTTCCATCGGCGTCAATC  
 TCTGCTTAGGATTCACAGCAAGTCAATTAAGAGGGCCGAATGGGATGAAGGACCTCCACAGTGTATC  
 TGACTCTCCATGGACCAACACATCTGGATCCTGCAAAGGTAGATGCTTTGAGCTTCAAGAGTTGGACCT  
 CCTGACTGTCGGTGTGACAACCTATGTAAGAGCTACAGCAGCTGCTGCCATGATTTTGTAGACTCTGTT  
 TGAAAACAGCTCGAGGCTGGGAGTGCACCAAGACAGATGTGGGGAAGTACGAAATGAGGAAAATGCCTG  
 TCACTGCTCAGAAGACTGCTTGTCCCGGGGAGACTGCTGTACCACTACCAAGTGGTCTGCAAAGGAGAA  
 TCACACTGGGTAGATGATGACTGTGAAGAAATAAGAGTCCCCGAATGCCCTGCAGGGTTTGTCCGCCCTC  
 CGTTAATCATCTTCTCTGTGGATGGATTCCGTGCATCGTACATGAAGAAAGGCAGCAAGGTTATGCCCAA  
 CATTGAGAAACTGCGGTCTGTGGCACCATGCTCCCTACATGAGGCCTGTGTACCCTACAAAAACCTTC  
 CCTAATCTGTATACGCTGGCCACTGGTTTATATCCAGAATCCCATGGAATCGTTGCAATCAATGTATG  
 ACCCTGTCTTTGATGCTACTTTCCATCTTCGAGGGCGAGAGAAGTTTAAACATAGATGGTGGGGAGGCCA  
 ACCGCTATGGATTACAGCCACCAAGCAAGGGGTGAGAGCCGGGACATTCTTTTGGTCTGTGAGCATCCCT  
 CACGAGCGGAGAAATCCTAACTATCCTTCAGTGGCTTTCCCTGCCAGACAATGAGAGGCCCTCAGTTTATG  
 CCTTCTACTCCGAGCAGCTGATTTTCTGGACACAAGTACGGCCCTTTTGGCCCTGAGGAGAGTAGTTA  
 TGGCTCACCTCTTACTCCGGCTAAAAGACCTAAGAGGAAAGTTGCCCTAAGAGGAGACAGGAAAGACCA  
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 AGGAACTCATGAAGATGCACACAGCTCGGGTGGGGACATCGAGCATCTCACCGGTTTGGATTTCTACCG  
 GAAGACTAGCCGTAGCTATTCGGAATTTCTGACCCTCAAGACATACCTGCATACATATGAGAGCGAGATT

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR231370 representing NM\_001285995  
 Red=Cloning site Green=Tags(s)

MARQCGFGSYQVISLFTFAIGVNLCLGFTASRIKRAEWDEGPPTVLSDSPWTNTSGSCKGRFCLEQEVGP  
 PDCRCDNLCKSYSSCCHDFDELCLKTARGWECTKDRCGEVRNEENACHCEDCLSRGDCCNTNYQVCKGE  
 SHWVDDDCIEIRVPECPAGFVRPPLIIIFSVDFRASymkKGSkVMPNIEKLRSCGTHAPYMRPVYPTKTF  
 PNLTYLATGLYPESHGIVGNSMYDPVFDAFHLRGREKFNHRWGGQPLWITATKQGVRAgTFFWSVSIP  
 HERRILITLQWLSLPDNERPSVYAFYSEQPDFSGHKYGFPGPEESSYGSPLTPAKRPKRKVAPKRRQERP  
 VAPPKKRRRKLHRMDHYTAETRQDKMTNPLREIDKTVGQLMDGLKQLKLRHRCVNVIFVGDHGMEDVTCDR  
 TEFLSNYLTNVDDITLVPGLGRIRPKIPNNLKYDPKAIIANLTCKKPDQHFkPYMKQHLPKRLHYANNR  
 RIEDLHLLVERRWHVARKPLDVYKPKSGKCFQGDHGFNDKVNsmQTVFVGyGPTFKYRtkVPPFENIEL  
 YNVMCDLLGLKPAPNNGTHGSLNHLRTNFRPTLPEEVSrPNYPGIMYLQSDFDLgCTCDDKNLEELN  
 KRLHTKGSTEERHLLYGRPAVLYRTSYDILYHTDFESGYSEIFLMPLWTSYTIKQAEVSSiPEHLTNCV  
 RPDVrVSPGFSQnCLAYKNDKQMSYGLFPPYLSSPEAKYDAFLVTNMVPMYAFKRVWtYFQRVLVKK  
 YASERNGVNVISGPIFDYNYNGLRDIEDEIKQYVEGSSIPVPTHYYSIIITsCLDFtQPADKCDGPLSVSS  
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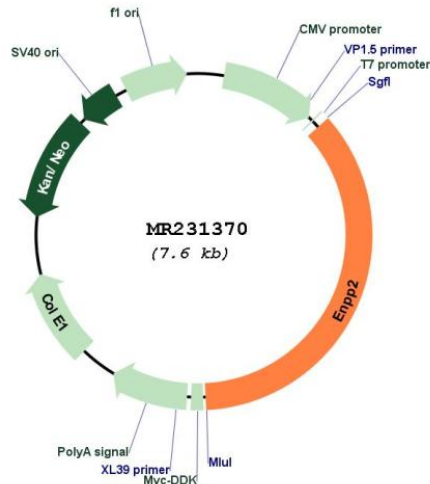
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_001285995

**ORF Size:** 2730 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\\_001285995.2](#), [NP\\_001272924.1](#)

**RefSeq Size:** 3605 bp

**RefSeq ORF:** 2733 bp

**Locus ID:** 18606

**UniProt ID:** [Q9R1E6](#)

**Cytogenetics:** 15 D1

**MW:** 105.1 kDa

**Gene Summary:** This gene encodes a member of the phosphodiesterase and nucleotide pyrophosphatase family of bifunctional enzymes that hydrolyze phosphodiester bonds of various nucleotides. The encoded protein undergoes proteolytic processing to generate a mature protein with lysophospholipase D activity, catalyzing the cleavage of the choline group from lysophosphatidylcholine to produce lysophosphatidic acid. This gene is expressed in numerous tissues and participates in neural development, obesity, inflammation and oncogenesis. A complete lack of the encoded protein in mice results in aberrant vascular and neuronal development leading to embryonic lethality. Alternative splicing results in multiple transcript variants encoding different isoforms that may undergo similar processing to generate the mature protein. [provided by RefSeq, Sep 2015]