

## Product datasheet for **MR223207**

### Enpp2 (NM\_001136077) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Enpp2 (NM_001136077) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Enpp2
Synonyms:	AT; ATX; Auto; E-NPP 2; lysoPLD; N; Npps2; Pd; PD-; PD-1alpha; Pdnp2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>MR223207 representing NM\_001136077  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**GCGATCGCC**

ATGGCAAGACAAGGCTGTTTCGGGTCATACCAGGTAATATCCTTGTTCACTTTTGCCATCGGCGTCAATC  
 TCTGCTTAGGATTCACAGCAAGTCAATTAAGAGGGCCGAATGGGATGAAGGACCTCCACAGTGTATC  
 TGAATCTCCATGGACCAACACATCTGGATCCTGCAAAGGTAGATGCTTTGAGCTTCAAGAGTTGGACCT  
 CCTGACTGTCGGTGTGACAACTATGTAAGAGCTACAGCAGCTGCTGCCATGATTTTGTAGACTCTGTT  
 TGAAAACAGCTCGAGGCTGGGAGTGCACCAAAGACAGATGTGGGGAAGTACGAAATGAGGAAAATGCCTG  
 TCACTGCTCAGAAGACTGCTTGTCCCGGGGAGACTGCTGTACCACTACCAAGTGGTCTGCAAAGGAGAA  
 TCACACTGGGTAGATGATGACTGTGAAGAAATAAGAGTCCCCGAATGCCCTGCAGGGTTTGTCCGCCCTC  
 CGTTAATCATCTTCTCTGTGGATGGATTCCGTGCATCGTACATGAAGAAAGGCAGCAAGGTTATGCCCAA  
 CATTGAGAAACTGCGGTCTGTGGCACCATGCTCCCTACATGAGGCCTGTGTACCCTACAAAAACCTTC  
 CCTAATCTGTATACGCTGGCCACTGGTTTATATCCAGAATCCCATGGAATCGTTGCAATCAATGTATG  
 ACCCTGTCTTTGATGCTACTTTCCATCTTCGAGGGCGAGAGAAGTTTAAACATAGATGGTGGGGAGGCCA  
 ACCGCTATGGATTACAGCCACCAAGCAAGGGGTGAGAGCCGGGACATTCTTTTGGTCTGTGAGCATCCCT  
 CACGAGCGGAGAAATCCTAACTATCCTTCAGTGGCTTTCCCTGCCAGACAATGAGAGGCCCTCAGTTTATG  
 CCTTCTACTCCGAGCAGCTGATTTTCTGGACACAAGTACGGCCCTTTTGGCCCTGAGGAGAGTAGTTA  
 TGGCTCACCTCTTACTCCGGCTAAAAGACCTAAGAGGAAAGTTGCCCTAAGAGGAGACAGGAAAGACCA  
 GTTGCTCCTCAAAGAAAAGAAGAAGAAAATTACATAGGATGGATCATTATACAGCGGAAACACGTCAGG  
 ACAAAATGACAAATCCTCTGAGGGAGATTGACAAGACCGTGGGGCAGTTAATGGACGGACTGAAACAAT  
 CAAGCTGCACCGTTGTGTAATGTTATCTTTGTTGGAGACCATGGAATGGAAGACGTGACATGTGACAGA  
 ACTGAGTCTTGACAACTATCTGACTAACGTGGATGATTAATCTTTAGTACCTGGAACCTAGGAAGAA  
 TTCGACCAAGATTCCCAATAATCTTAAATATGACCCTAAAGCCATTATTGCTAACCTCACGTGTAAGAA  
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 AGAAGCCGTCAGGAAAATGTTTTTCCAGGGTACCACGGCTTTGATAACAAGGTCAATAGCATGCAGAC  
 TGTTTTGTAGGTTATGGCCCACTTTTAAAGTACAGGACTAAAGTGCCTCCATTTGAAAACATTGAACTT  
 TATAATGTTATGTGCGATCTCCTAGGCTTGAAGCCAGCTCCCAATAATGGAACACATGGAAGTTTGAATC  
 ACCTGCTACGCACAAATACCTTTAGGCCAACCTACCAGAGGAAGTCAGCAGACCCAATACCCAGGGAT  
 TATGTACCTTCAGTCTGATTTTACCTGGGCTGCACCTGTGATGATAAGGTAGAGCCAAAGAACAATTTG  
 GAAGAACTAAATAAACGCCTTCATACCAAAGGATCTACAGAAGAGAGACATCTCCTGTATGGACGACCTG  
 CAGTGCTTTATCGGACTAGCTATGATATCTTATACCATACGGACTTTGAAAGTGGTTACAGTGAAATATT  
 CTTAATGCCTCTCTGGACTTCTTATACCATTTCTAAGCAGGCTGAGGTCTCTAGCATCCCAGAGCACCTG  
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 ATAAACAGATGTCCTATGGATTCCTTTTCCCTCCCTATCTGAGCTTCCCAGAAAGCGAAATATGATGC  
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 TTGGTGAAGAAAATATGCGTCAGAAAGGAATGGGGTCAACGTAATAAGTGGACCGATCTTTGACTACAATT  
 ACAATGGCTTACGTGACATTGAGGATGAAATTAACAGTATGTGGAAGGCAGCTCTATTCCTGTCCCTAC  
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 TCTGTGCTTCTTTATCCTTCTCACCAGCTGACAATGATGAGAGCTGTAATAGTTCGAGGATGAGT  
 CGAAGTGGGTAGAGGAACTCATGAAGATGCACACAGCTCGGGTGAAGGACATCGAGCATCTACCCGGTTT  
 GGATTTCTACCGAAGACTAGCCGTAGCTATTCGAAATCTGACCCTCAAGACATACCTGCATACATAT  
 GAGAGCGAGATT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAAGTTTAA

**Protein Sequence:** >MR223207 representing NM\_001136077  
Red=Cloning site Green=Tags(s)

MARQCGFGSYQVISLFTFAIGVNLCLGFTASRIKRAEWDEGPPTVLSDSPWTNTSGSCKGRFCLEQEVGP  
 PDCRCDNLCKSYSSCCHDFDELCLKTARGWECTKDRCGEVRNEENACHCEDCLSRGDCCNTNYQVCKGE  
 SHWVDDDCIEIRVPECPAGFVRPPLIIFSVDFRASYMKKGSVMPNIEKLRSCGTHAPYMRPVYPTKTF  
 PNLTYLATGLYPESHGIVGNSMYDPVFDAFHLRGREKFNHRWGGQPLWITATKQGVRAAGTFFWVSYSIP  
 HERRILITLQWLSLPDNERPSVYAFYSEQPDFSGHKYGFPGPEESSYGSPLTPAKRPRKRVAPKRRQERP  
 VAPPKRRRKLHRMDHYAETRQDKMTNPLREIDKTVGQLMDGLKQLKLRHRCVNVIFVGDHGMEDVTCDR  
 TEFLSNYLTNVDDITLVPGLGRIRPKIPNLLKYPKAI IANLTCKKPDQHFKPYMKQHLPKRLHYANNR  
 RIEDLHLLVERRWHVARKPLDVYKPKSGKCFQGDHGFNDKVNMQTVFVGYGPTFKYRTKVPFFENIEL  
 YNVMCDLLGLKPAPNNGTHGSLNHLRTNTFRPTLPEEVSRLNYPGIMYLQSDFDLGTCDKVEPKNKL  
 EELNKRLHTKGSSTEERHLLYGRPAVLRYTSYDILYHTDFESGYSEIFLMPLWTSYTIKQAEVSSIPEHL  
 TNCVPRDVRVSPGFSQNCLAYKNDKQMSYGFLLFPYLSSSPEAKYDAFLVTNMVMPYPAFKRVWTFQRV  
 LVKKYASERNGVNVISGPIFDYNYNGLRDIEDEIKQYVEGSSIPVPTHYYSIITSCLDFTQPADKCDGPL  
 SVSSFILPHRPDNDSECSSEDESKWVEELMKMHTARVRDIEHLTGLDFYRKTSRSYSEILTLKTYLHTY  
 ESEI

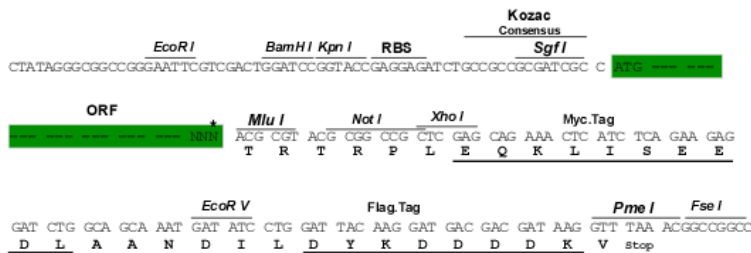
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mm9003\\_b03.zip](https://cdn.origene.com/chromatograms/mm9003_b03.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



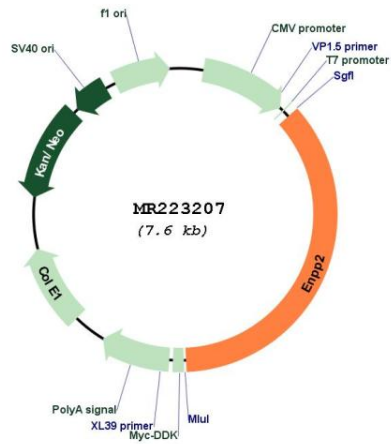
\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_001136077

**ORF Size:** 2742 bp

<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<b>OTI Annotation:</b>	This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>
<b>RefSeq:</b>	<a href="#">NM_001136077.3</a>
<b>RefSeq Size:</b>	2745 bp
<b>RefSeq ORF:</b>	2745 bp
<b>Locus ID:</b>	18606
<b>UniProt ID:</b>	<a href="#">Q9R1E6</a>
<b>Cytogenetics:</b>	15 D1
<b>MW:</b>	105.5 kDa
<b>Gene Summary:</b>	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]

Product images:



Circular map for MR223207