

## Product datasheet for **RG216521**

### ENPP2 (NM\_006209) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ENPP2 (NM_006209) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	ENPP2
Synonyms:	ATX; ATX-X; AUTOTAXIN; LysoPLD; NPP2; PD-IALPHA; PDNP2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG216521 representing NM\_006209  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGATCGCC**

ATGGCAAGGAGGAGCTCGTTCCAGTCGTGTGAGATAATATCCCTGTTCACTTTTGCCGTTGGAGTCAGTA  
 TCTGCTTAGGATCACTGCACATCGAATTAAGAGAGCAGAAGGATGGGAGGAAGGTCCTCTACAGTGCT  
 ATCAGACTCCCCCTGGACCAACATCTCCGGATCTTGCAAGGGCAGGTGCTTTGAACCTCAAGAGGCTGGA  
 CCTCTGATTGTCGCTGTGACAACCTGTGTAAGAGCTATACCAGTTGCTGCCATGACTTTGATGAGCTGT  
 GTTTGAAGACAGCCCGTGGCTGGGAGTGTACTAAGGACAGATGTGGAGAAGTCAGAAATGAAGAAAATGC  
 CTGTCAGTCTCAGAGGACTGCTTGCCAGGGGAGACTGCTGTACCAATTACCAAGTGGTTTGCAAAGGA  
 GAGTCGCATTGGGTTGATGATGACTGTGAGGAAATAAGGCCGAGAATGCCCTGCAGGGTTTGTTCGCC  
 CTCATTAAATCATCTTCCGTTGGATGGCTTCCGTGCATCATACATGAAGAAAGGCAGCAAAGTCATGCC  
 TAATATTGAAAACTAAGTCTTGTGGCACACACTCTCCCTACATGAGGCCGGTGTACCCAATAAAACC  
 TTTCTAACTTATACACTTTGGCCACTGGGCTATATCCAGAATCATGGAATGTTGGCAATTCATGT  
 ATGATCCTGTATTTGATGCCACTTTTCTGCGAGGGCGAGAGAAATTAATCATAGATGGTGGGGAGG  
 TCAACCGCTATGGATTACAGCCACCAAGCAAGGGGTGAAAGCTGGAACATTCTTTTGGTCTGTTGTCATC  
 CCTCAGAGCGGAGAATTAACCATATTGCGGTGGCTCACCCCTGCCAGATCATGAGAGGCCCTTCGGTCT  
 ATGCCCTTCTATTCTGAGCAACCTGATTTCTTGGACACAAATATGGCCCTTTCGGCCCTGAGGAGAGTAG  
 TTATGGCTCACCTTTACTCCGGCTAAGAGACCTAAGAGGAAAGTTGCCCTAAGAGGAGACAGGAAAGA  
 CCAGTTGCTCTCAAAGAAAAGAAGAAGAAAATACATAGGATGGATCATTATGCTCGGAAAACCTCGTC  
 AGGCAAAAATGACAAAATCTCTGAGGAAAATCGACAAAATTTGGGGCAATTAATGGATGGACTGAAACA  
 ACTAAAACCTGCGTCGGTGTGCAACGTCTCTTTGTCGGAGACCATGGAATGGAAGATGTACATGTGAT  
 AGAACTGAGTTCTTGAGTAATTACCTAACTAATGTGGATGATTAATTTAGTGCCTGGAACCTAGGAA  
 GAATTCGATCCAAATTTAGCAACAATGCTAAATATGACCCCAAAGCCATTATTGCCAATCTCACGTGTA  
 AAAACCAGATCAGCACTTAAGCCTTACTTGAACAGCACCTTCCCAAACGTTTGCCTATGCCAACAC  
 AGAAGAATTGAGGATATCCATTTATTGGTGAACGCAGATGGCATGTTGCAAGGAAACCTTTGGATGTT  
 ATAAGAAACCATCAGGAAAATGCTTTTCCAGGGAGACCAGGATTTGATAACAAGGTCAACAGCATGCA  
 GACTGTTTTTGTAGGTTATGGCCCAACATTTAAGTACAAGACTAAAGTGCCTCCATTTGAAAACATTGAA  
 CTTTACAATGTTATGTGTGATCTCTGGGATTGAAGCCAGCTCCTAATAATGGGACCCATGGAAGTTTGA  
 ATCATCTCTGCGCACTAATACCTTCAAGCCAACCATGCCAGAGGAAGTTACCAGACCCAATTATCCAGG  
 GATTATGTACCTCAGTCTGATTTTACCTGGGCTGCACTTGTGATGATAAGGTAGAGCCAAAGAACAAG  
 TTGGATGAACTCAACAAACGGCTTCATACAAAAGGGTCTACAGAAGAGAGACACCTCCTCTATGGGCGAC  
 CTGCAAGTCTTTATCGGACTAGATATGATATCTTATACACACTGACTTTGAAAGTGGTTATAGTGAAAT  
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 CTGACCAGTTGCGTCCGGCCTGATGTCCGTGTTTCTCCGAGTTTCAGTCAGAAGTGTGGCCTACAAAA  
 ATGATAAGCAGATGTCTACGGATTCCTTTCTCTCTTATCTGAGCTCTTACCAGAGGCTAAATATGA  
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 AACTCACTACTACAGCATCATCACCAGCTGTCTGGATTTCACTCAGCCTGCCGACAAGTGTGACGGCCCT  
 CTCTCTGTGCTCTCTTCTCTGCTCACCAGGCTGACAACGAGGAGAGCTGCAATAGCTCAGAGGACG  
 AATCAAAATGGGTAGAAGAACTCATGAAGATGCACACAGCTAGGGTGCCTGACATTGAACATCTCACCAG  
 CCTGGACTTCTCCGAAAGACCAGCCGAGCTACCCAGAAATCCTGACACTCAAGACATACCTGCATACA  
 TATGAGAGCGAGATT

**ACGCGT**ACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG216521 representing NM\_006209  
 Red=Cloning site Green=Tags(s)

MARRSSFQSCQIISLFTFAVGVSICLGFTAHRKRAEGWEEGPPTVLSDSPWTNISGSCKGRFELQEAG  
 PPDCRCNDLCKSYTSCCHDFDELCLKTARGWECTKDRCGEVRNEENACHCEDCLARGDCCTNYQVVCKG  
 ESHWVDDDCCEEIKAAECPAGFVRPPLIIFSVDFRASVMKKGSKVMPNIEKLRSCGTHSPYMRPVYPTKT  
 FPNLYTLATGLYPESHGIVGNSMYDPVFDATFHILRGREKFNHRWWGGQPLWITATKQGVKAGTFFWSVVI  
 PHERRILTILRWLTLPDHERPSVYAFYSEQPDFSGHKYGPFGPEESSYGSFPFPAKRPKRKVAPKRRQER  
 PVAPPKRRRRIHRMDHYAAETRDQKMTNPLREIDKIVGQLMDGLKQLKLRRCVNVIFVGDHGMEDVTC  
 RTEFLSNYLTNVDDITLVPGLGRIRSKFSNNAKYDPKAIIANLTCKKPDQHFYKPYLKQHLPKRLHYANN  
 RRIEDIHLLVERRWHVARKPLDVYKPSGKCFQGDHGFDNKVNMQTFVVGYPGTFKYKTKVPPFENIE  
 LYNVMCDLLGLKPAPNNGTHGSLNHLRTNTFRPTMPEEVTRPNYPGIMYLQSDFDLGTCDCKVEPKNK  
 LDELNKRHLTKGSTEERHLLYGRPAVLRYTRYDILYHTDFESGYSEIFMLLWTSYTVSKQAEVSSVPDH  
 LTSCVRPDRVSPFSQNCCLAYKNDKQMSYGLFPPYLSSPEAKYDAFLVTNMVPMYPAKRVWNYFQR  
 VLVKKYASERNGVNVISGPIFDYDYDGLHDTEDKIKQYVEGSSIPVPTHYYSIITSLDFTPADKCDGP  
 LSVSSFILPHRPDNEESCNSSEDESKWVEELMKMHTARVRDIEHLTSLDFFRKTSRYPEILTTLKTYLHT  
 YESEI

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

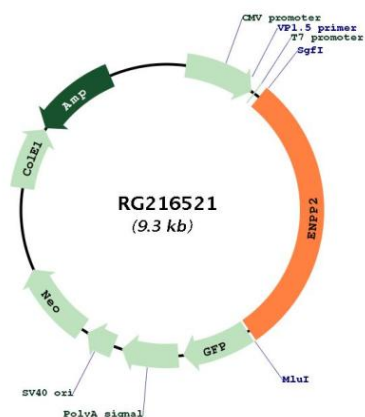
Cloning Scheme:



ACCN: NM\_006209

<b>ORF Size:</b>	2745 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_006209.2</a> , <a href="#">NP_006200.2</a>
<b>RefSeq Size:</b>	3231 bp
<b>RefSeq ORF:</b>	2748 bp
<b>Locus ID:</b>	5168
<b>UniProt ID:</b>	<a href="#">Q13822</a>
<b>Cytogenetics:</b>	8q24.12
<b>Domains:</b>	SO, Endonuclease, Phosphodiesterase
<b>Protein Families:</b>	Druggable Genome, Transcription Factors, Transmembrane
<b>Protein Pathways:</b>	Ether lipid metabolism
<b>Gene Summary:</b>	The protein encoded by this gene functions as both a phosphodiesterase, which cleaves phosphodiester bonds at the 5' end of oligonucleotides, and a phospholipase, which catalyzes production of lysophosphatidic acid (LPA) in extracellular fluids. LPA evokes growth factor-like responses including stimulation of cell proliferation and chemotaxis. This gene product stimulates the motility of tumor cells and has angiogenic properties, and its expression is upregulated in several kinds of carcinomas. The gene product is secreted and further processed to make the biologically active form. Several alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Aug 2008]

Product images:



Circular map for RG216521