

Product datasheet for **RC209222**

ENPP1 (NM_006208) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ENPP1 (NM_006208) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ENPP1
Synonyms:	ARHR2; COLED; M6S1; NPP1; NPPS; PC-1; PCA1; PDNP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC209222 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGACGTGGGGAGGAGCCGCTGGAGAAGGCGCGCGCCCGCACTGCCAAGGACCCCAACCTATA
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ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209222 protein sequence
Red=Cloning site Green=Tags(s)

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MDVGEEPLEKAARARTAKDPNTYKVL SL VL SVCVLT T T I L G C I F G L K P S C A K E V K S C K G R C F E R T F G N C R C
DAACVELGNCCLDYQETCIEPEHIWTCNKFRGCEKRL TRSLCACSDDCDKDGCCINYSVCQGEKSWVE
EPCESINEPQCPAGFETPPTLLFSLDGFRAEYLHTWGGLLPVISKLKKCGTYTKNMRPVYPTKTFPNHYS
IVTGLYPESHGII DNKMYDPKMNASFSLKSKEKFNPEWYKGEPIWVTAKYQGLKSGTFFWPFGSDVEINGI
FPDIYKMYNGSVPFERILAVLQWLQLPKDERPHFYTLYLEEPDSSGHSYGPVSSEVIKALQRVDGMVGM
LMDGLKELNLHRCLNLI I SDHGMEQGSCCKYIYLNKYLGDVKNIKVIYGAARLRPSDVPDKYYSFNYE
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YSQDILMPLWTSYTVDRNDSFSTEDFSNCLYQDFRIPLSPVHKCSFYKNNTKVSYGFLSPPQLNKNSSGI
YSEALLTTNIVPMYQSFQVIWRYFHDTLLRKYAEERNGVNVSVPVDFDYDGRCDSENLRQKRRVIRN
QEILIPTHFFIVLTSCKDTSQTPLHCENLDTLAFILPHRTDNSESCVHGKHDSSWVEELMLHRARITDV
EHITGLSFYQQRKEPVS D I L K L K T H L P T F S Q E D
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TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6202_a09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



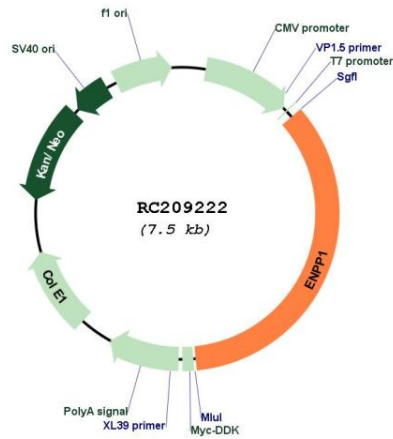
* The last codon before the Stop codon of the ORF

ACCN:	NM_006208
ORF Size:	2619 bp
OTI Disclaimer:	<p>Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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</p>
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:	<ol style="list-style-type: none"> 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.
Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	NM_006208.1 , NP_006199.1
RefSeq Size:	7442 bp
RefSeq ORF:	2778 bp
Locus ID:	5167
UniProt ID:	P22413
Cytogenetics:	6q23.2
Domains:	SO, Endonuclease, Phosphodiesterase
Protein Families:	Druggable Genome, Transmembrane
Protein Pathways:	Metabolic pathways, Nicotinate and nicotinamide metabolism, Pantothenate and CoA biosynthesis, Purine metabolism, Riboflavin metabolism, Starch and sucrose metabolism

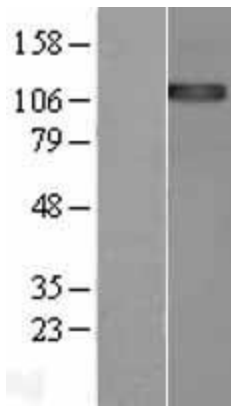
MW: 99.9 kDa

Gene Summary: This gene is a member of the ecto-nucleotide pyrophosphatase/phosphodiesterase (ENPP) family. The encoded protein is a type II transmembrane glycoprotein comprising two identical disulfide-bonded subunits. This protein has broad specificity and cleaves a variety of substrates, including phosphodiester bonds of nucleotides and nucleotide sugars and pyrophosphate bonds of nucleotides and nucleotide sugars. This protein may function to hydrolyze nucleoside 5' triphosphates to their corresponding monophosphates and may also hydrolyze diadenosine polyphosphates. Mutations in this gene have been associated with 'idiopathic' infantile arterial calcification, ossification of the posterior longitudinal ligament of the spine (OPLL), and insulin resistance. [provided by RefSeq, Jul 2008]

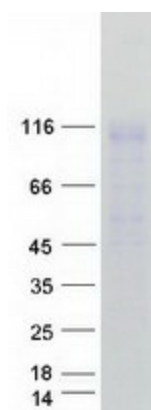
Product images:



Circular map for RC209222



Western blot validation of overexpression lysate (Cat# [LY401871]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209222 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ENPP1 protein (Cat# [TP309222]). The protein was produced from HEK293T cells transfected with ENPP1 cDNA clone (Cat# RC209222) using MegaTran 2.0 (Cat# [TT210002]).