

## Product datasheet for **RC224818**

### ENPP3 (NM\_005021) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	ENPP3 (NM_005021) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ENPP3
Synonyms:	B10; CD203c; NPP3; PD-IBETA; PDNP3
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC224818 representing NM\_005021  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGGAATCTACGTTGACTTTAGCAACGGAACAACCTGTTAAGAAGAACACTCTTAAGAAATATAAAATAG  
 CTGCAATTGTTCTTCTTGTCTTGTCTGGTATCATGTCACCTGGATTAGGCCTGGGGCTTGGACTCAGGAA  
 ACTGGAAGCAAGGCAGCTGCAGGAAGAAGTGTCTTGTATGCATCATTTAGAGGACTGGAGAAGTCCCGG  
 TGTGATGTGGCATGTAAGACCGAGGTGATTGCTGCTGGGATTTTGAAGACACCTGTGTGGAATCAACTC  
 GAATATGGATGTGCAATAAATTTCTGTTGTGGAGAGACCAGATTAGAGGCCAGCCTTTGCTCTTGTTCAGA  
 TGACTGTTTGCAGAGGAAAGATTGCTGTGCTGACTATAAGAGTGTGGCAAGGAGAAACCTCATGGCTG  
 GAAGAAAAGTGTACACAGCCAGCAGTCTCAGTCCCAGAAGGGTTTGACCTGCCACAGTTATCTTGT  
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 ACCATTGTCACGGCTTGTATCCAGAGTCACATGGCATCATTGACAATAATATGTATGATGATAAATCTCA  
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 GACAGCAATGTATCAAGTTTAAAAGCCGCTACCTACTTTTGGCCCGGATCAGAAGTGGCTATAAATGGC  
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 ATGTTGATGGAAGGCCTGAAGCAGCGGAATTTGCACAACCTGTGTCAATATCATCCTTCTGGCTGACCATG  
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 GCTGGCTGTTAGGAGTAAATCAAATACAAATTGTGGAGGAGGCAACCATGGTTATAACAATGAGTTTAGG  
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 TAAAGACATATTTACCAACATTTGAAACCACTATT

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC224818 representing NM\_005021  
 Red=Cloning site Green=Tags(s)

MESTLTLATEQPVKNTLKKYKIACIVLLALLVIMSLGLGLGLRLEKQGSCRKCCFDASFRGLENCR  
 CDVACKDRGDCCWDFEDTCVESTRIWMCNKFRCGETRLEASLCSDDCLQRKCCADYKSVQGETSWL  
 EENCDDTAQQSQCEPFGDLPPVILF SMDGFRAEYLTYWDTLKPINLKTGCIHVKYMRAMYPTKTFPNHY  
 TIVTGLYPESHGIIIDNNMYDVNLNKNFSLSSKEQNNPAWWHGQPMWLTAMYQGLKAATYFWPGSEVAING  
 SFPSIYMPYNGSVPFEEERISTLLKWLDPKAERPRFYTYMYFEEDSSGHAGGPVSARVIKALQVVDHAFG  
 MLMEGLKQRNLHNCVNIILLADHGMDQTYCNKMEYMTDYFPRINFFYMYEGPAPRIRAHNIPHDFFSFNS  
 EEIVRNLSCRKPDQHFHPYLPDLPKRLHYAKNVRIDKVLHFVDQQLAVRSKSNNTNCGGNGHGYNNEFR  
 SMEAIFLAHGSPFKEKTEVEPFENIEVYNLMCDLLRIQPAPNNGTHGSLNHLKVPFYEP SHAEVSKFS  
 VCGFANPLPTESLDCFCPLQNSTQLEQVNQMLNL TQEEITATVKVNLPGRPRVLQKNVDHCLLYHREY  
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 TDSQYDALITSNLVPMYEEFRKMWDYFHSVLL IKHATERNGVNVVSGPIFDYNYDGHFDAPDEITKHLA  
 NTDVPIPTHYFVVL T SCKNKSHTPENC PGWLDVLPFIIPHRPTNVE SCPEGKPEALWVEERFTAHIARVR  
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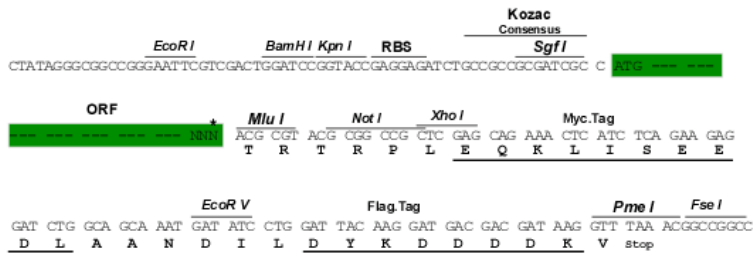
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg4301\\_a07.zip](https://cdn.origene.com/chromatograms/mg4301_a07.zip)

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:

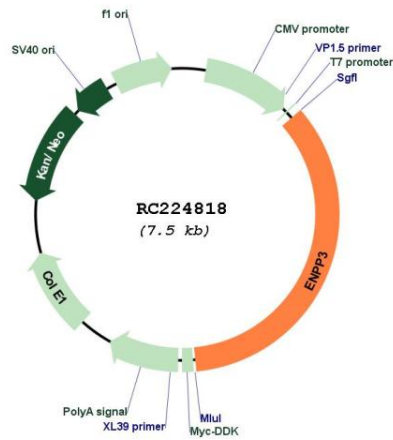


\* The last codon before the Stop codon of the ORF

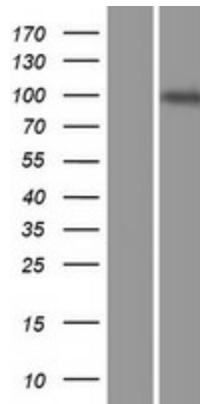
<b>ACCN:</b>	NM_005021
<b>ORF Size:</b>	2625 bp
<b>OTI Disclaimer:</b>	The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), 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_005021.5</a>
<b>RefSeq Size:</b>	2794 bp
<b>RefSeq ORF:</b>	2628 bp
<b>Locus ID:</b>	5169
<b>UniProt ID:</b>	<a href="#">O14638</a>
<b>Cytogenetics:</b>	6q23.2
<b>Domains:</b>	SO, Endonuclease, Phosphodiesterase
<b>Protein Families:</b>	Druggable Genome, Transmembrane
<b>Protein Pathways:</b>	Metabolic pathways, Nicotinate and nicotinamide metabolism, Pantothenate and CoA biosynthesis, Purine metabolism, Riboflavin metabolism, Starch and sucrose metabolism
<b>MW:</b>	99.9 kDa

**Gene Summary:**

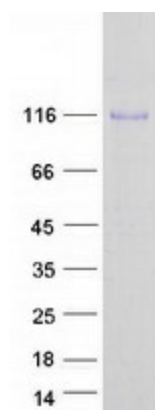
The protein encoded by this gene belongs to a series of ectoenzymes that are involved in hydrolysis of extracellular nucleotides. These ectoenzymes possess ATPase and ATP pyrophosphatase activities and are type II transmembrane proteins. Expression of the related rat mRNA has been found in a subset of immature glial cells and in the alimentary tract. The corresponding rat protein has been detected in the pancreas, small intestine, colon, and liver. The human mRNA is expressed in glioma cells, prostate, and uterus. Expression of the human protein has been detected in uterus, basophils, and mast cells. Two transcript variants, one protein coding and the other non-protein coding, have been found for this gene. [provided by RefSeq, Oct 2015]

**Product images:**


Circular map for RC224818



Western blot validation of overexpression lysate (Cat# [LY417583]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC224818 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified ENPP3 protein (Cat# [TP324818]). The protein was produced from HEK293T cells transfected with ENPP3 cDNA clone (Cat# RC224818) using MegaTran 2.0 (Cat# [TT210002]).