

## Product datasheet for **RC209037**

### **NPEPPS (NM\_006310) Human Tagged ORF Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	NPEPPS (NM_006310) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	NPEPPS
Synonyms:	AAP-S; MP100; PSA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC209037 representing NM\_006310  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTGGCTGGCAGCTGCCGCCCTCCCTCGTCGCCCTGCTCTTCTCGGCCCTCCGCCTCTCCCC  
 TCCTCTTCTCGTCTTACGCCGCTCCTCTCGCCGCCCTCCACAGCCTGGGCCTCGCCCGATGCCGGA  
 GAAGAGGCCCTTCGAGCGGCTGCCTGCCGATGTCTCCCCATCAACTACAGCCTTTGCCTCAAGCCCGAC  
 TTGCTGGACTTACCTTCGAGGGCAAGCTGGAGGCCGCCGCCAGGTGAGGCAGGCGACTAATCAGATTG  
 TGATGAATTGTGCTGATATTGATATTATTACAGCTTCATATGCACCAGAAGGAGATGAAGAAATACATGC  
 TACAGGATTTAACTATCAGAATGAAGATGAAAAAGTACCTTGTCTTCCCTAGTACTCTGCAAACAGGT  
 ACGGGAACCTTAAAGATAGATTTTGTGGAGAGCTGAATGACAAAATGAAAGTTTCTATAGAAGTAAAT  
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 TTTTCTTGTCTGGGATGAGCCTGCTATCAAAGCAACTTTTGATATCTCATTGGTTGTTCTTAAAGACAGA  
 GTAGCTTTATCAAACATGAATGAATTGACCGGAAACCATACCCTGATGATGAAAATTTAGTGGAAGTGA  
 AGTTTGCCCGCACACCTGTTATGTCTACATATCTGGTGGCATTGTTGTGGGTGAATATGACTTTGTAGA  
 ACAAAGTCAAAGATGGTGTGTGTGTCGGTGTACACTCCTGTTGGCAAAGCAGAGCAAGGAAAATTT  
 GCGTTAGAGGTTGCTGCTAAAACCTTGCCTTTTATAAGGACTACTTCAATGTTCTTATCCTCTACCTA  
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 GGAGACTGCATTGCTTATTGATCCAAAAATCCTGTTCTTATCCCGCCAGTGGGTTGCTCTGGTTGTG  
 GGACATGAACCGCCCATCAATGGTTTGGAAATCTGTTACTATGGAATGGTGGACTCATCTTGGTTAA  
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 GTTCCAACAAAAGATGCTGCCACAGAGGATCTCTGGGAAAGTTAGAAAATGCTAGTGGTAAACCTATA  
 GCAGCTGTGATGAATACCTGGACAAACAAATGGGATTTCCCTCATTATGTGGAAGCTGAACAGGTAG  
 AAGATGACAGATTATTGAGGTTGCCAAAAGAAGTCTGTGCTGGTGGTCATATGTTGGTGAAGATTG  
 TCCCCAGTGGATGGTCCCTATCACAATCTACTAGTGAAGACCCCAACCAGGCCAAACTAAAAATCTA  
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 CCTTCTCTGCCCTGTGGATCGACTTGATTACAGAATGACCTCTTCTCCTTGGCTCGAGCTGGAATC  
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 AAGTCTCACGTTTGCATTTTCAAGAGAGTACGTCCACAGGACTGTATCGGTAATTGGTGGAGTAGC  
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 CGATACCAGGGAGGATTCTTAATATCCAGACTAATAAAGCTATCAGTTGAGGGATTTGCAGTTGATAAAA  
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 CAGCGGAAGGCCACACCACAGTG

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC209037 representing NM\_006310  
 Red=Cloning site Green=Tags(s)

MWLA AAPSLARRLLFLGPPPPPLLLL VFSRSSRRRLHSLGLAAMPEKRPFERLPADVSPINYSLCLKPDL  
 LLDFTFEGKLEAAAQVRQATNQIVMNCADIDIITASYAPEGDEEIHATGFNYQNEDEKVTLSFPSTLQTG  
 TGTLKIDFVGLNDKMKGFYRSKYTTPSGEVRYAAVTQFEATDARRAFPCWDEPAIKATFDISLVVPKDR  
 VALSNMNVIDRKPYPDDENLVEVKFARTPVMSTYLVAFVVGGEYDFVETRSKDGVCVRVYTPVGKAEQKGF  
 ALEVAAKTLPFYKYDFNVPYPLPKIDLIAIADFAAGAMENWGLVTYRETALLIDPKNSCSSSRQWVALV  
 GHLELAHQWFGNLVTMEWHTLWLNELGASWIEYLCVDHCFPEYDIWTQFVSADYTRAQELDALDNSHP  
 IESVGHVSEVDEIFDAISYSGASVIRMLHDYIGDKDFKGMNMYLTKFQQKNAATEDLWESLENASGKPI  
 AAVMNTWTKQMGFPLIYVEAEQVEDRLLRLSQQKFCAGGSYVGEDCPQWMPITISTSEDPNQAQKIL  
 MDKPEMNVVLLKNVQPDQWVKNLGTGVGFYRTQYSSAMLESLLPGIRDLSLPPVDRLGLQNDLFLARAGI  
 ISTVEVLKVMFAFVNPNYTVWSDLSNGLSTLLSHTDFYEEIQEFVKDVFSPIGERLWDPKPGEGH  
 LDALLRGLVGLKLGKAGHKATLEEARRRFKDHVEGKQILSADLRSPVYLVTKHGDGTTLDIMLKLHKQA  
 DMQEEKNRIERVLGATLLPDLIQKVLTFALSEVVRPQDTSVIGGVAGGSKHGRKAAWKFIKDNWEELYN  
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 QRKASPPTV

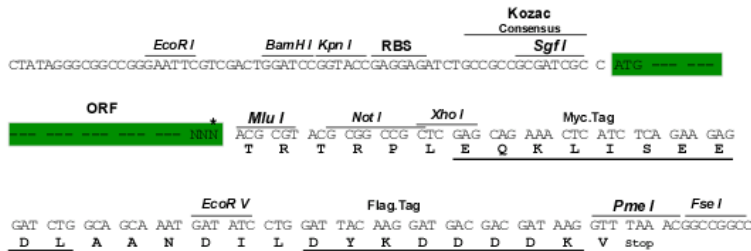
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mg3943\\_h02.zip](https://cdn.origene.com/chromatograms/mg3943_h02.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



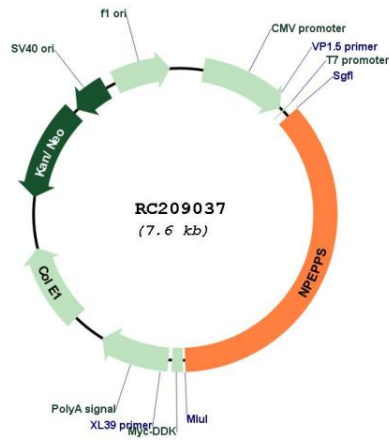
\* The last codon before the Stop codon of the ORF

ACCN: NM\_006310

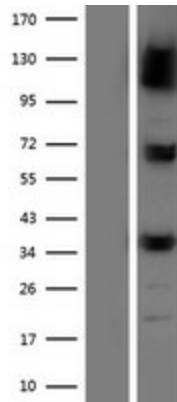
ORF Size: 2757 bp

<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_006310.4</a>
<b>RefSeq Size:</b>	4364 bp
<b>RefSeq ORF:</b>	2760 bp
<b>Locus ID:</b>	9520
<b>UniProt ID:</b>	<a href="#">P55786</a>
<b>Cytogenetics:</b>	17q21.32
<b>Domains:</b>	Peptidase_M1
<b>Protein Families:</b>	Druggable Genome, Protease
<b>MW:</b>	103.1 kDa
<b>Gene Summary:</b>	This gene encodes the puromycin-sensitive aminopeptidase, a zinc metallopeptidase which hydrolyzes amino acids from the N-terminus of its substrate. The protein has been localized to both the cytoplasm and to cellular membranes. This enzyme degrades enkaphalins in the brain, and studies in mouse suggest that it is involved in proteolytic events regulating the cell cycle. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RC209037



Western blot validation of overexpression lysate (Cat# [LY416726]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC209037 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).