

## Product datasheet for **RG216948**

### Leucyl cystinyl aminopeptidase (LNPEP) (NM\_175920) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Leucyl cystinyl aminopeptidase (LNPEP) (NM_175920) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LNPEP
Synonyms:	CAP; IRAP; P-LAP; PLAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG216948 representing NM_175920 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGATTGAAAACAGCATGTTTGAGGAAGAACCAGATGTGGTGGATTTAGCCAAAGAGCCTTGTTTACATC  
CTCTAGAGCCTGATGAGGTGGAATATGAGCCCCGGGTTCCCGACTGCTGGTGCGGGGTCTTGGTGAGCA  
TGAGATGGAGGAGGATGAAGAGGATTATGAGTCATCAGCAAAGCTGCTGGGCATGTCCTTCATGAATAGA  
AGCTCAGGCCTTCGGAACAGTCAACTGGTTACAGGCAGAGCCCAGATGGGGCTTGTTTCAGTACCCTCTG  
CAAGGACCATGGTGGTCTGTGCTTTTGTTCATCGTGGTGTCTGTTTCTGTAATCATGGTGATTACTTACT  
GCCCAGATGTACCTTTACCAAAGAAGGCTGCCATAAAAAAACCAAGTCAATTGGACTAATTCAGCCATTT  
GCAACAAATGGGAAATTGTTTCCATGGGCACAGATCAGGCTTCCCACTGCCGTTGTGCCACTACGCTATG  
AACTCAGCCTACACCCGAACCTAACCTCGATGACATTCAGGGGTTCTGTGACAATTTTCAGTTCAGGCTCT  
TCAGGTACATGGAATATCATTCTTCATAGCACAGGTCATAATATTTCAAGAGTGACCTTTATGTGACGA  
GTTTCAAGCCAAGAAAAACAAGCTGAGATCCTGGAATATGCATATCATGGACAGATCGCCATTGTTGCC  
CCGAAGCCCTTCTAGCAGGGCACAATTATACGTTGAAGATAGAGTACTCGGCAAAATATCTAGTTCCTTA  
TTATGGGTTTTATGGCTTCTCCTACACAGATGAAAGTAATGAGAAAAAGTACTTTGCAGCAACTCAGTTT  
GAACCCCTGGCAGCAAGATCTGCTTTTCTGTTTGTGTAACCCAGCATTAAAGCCACTTTTATCATCA  
AGATCATAAGGGATGAGCAATACACCGCTTTATCAAATATGCCTAAGAAGTCATCAGTCGTTCTAGATGA  
TGGACTTGTTTCAGGATGAGTTTTCTGAGAGTGTGAAGATGAGCACTTACTTGGTTGCTTTTATTGTGGGA  
GAGATGAAGAACCTGAGTCAGGACGTAATGGAACCCCTGGTTTCTATATGCTGTACCAGAAAAGATTG  
GTCAAGTTCATTATGCCTTGAAACAACCTGTGAAGCTTCTTGGTTTTTCAAACCTACTTTGAAATTCA  
GTACCCACTTAAGAAATGGATTTGGTGGCTATTCCTGACTTTGAAGCAGGAGCAATGGAATAATGGGGT  
TTGCTCACCTCCGAGAGGAGACACTTCTGTATGACAGTAACACTTCTTCAATGGCGGATAGAAAGCTGG  
TGACTAAAATCATTGCTCATGAGCTGGCCACCAGTGGTTTGGCAATCTGGTAACAAATGAAGTGGTGGAA  
TGACCTATGGCTAAATGAAGTTTTGCCACTTTCATGGAGATTTCTCTTTGAAAAAATATTCAAAGAG



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CTTTCTAGTTATGAAGATTTCTTAGATGCTCGATTTAAAACCATGAAGAAAGATTCCTTAAATTCATCTC  
 ATCCAATATCATCATCTGTTTCAGTCTTCAGAACAATGAAGAAATGTTTGATTCTTTTCTATTTTAA  
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 TACCTGCATAATCACAGCTATGCATCTATTCAAAGTGATGATCTGTGGGATAGTTTTAATGAGGTCACAA  
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 TCTTTTATCATTAGAACAGTGGGTGACATTTTCTGGACACTTACTGGCATGGGATTTTGTCAAAGAGA  
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 TTACCTGTTTTCAACAAGACACATTTATCTGAGGTTCAAGCATTCTTTGAAAATCAGTCAGAGGCAACC  
 TTCCGGCTTCGTTGTGTCCAGGAGGCTTGGAAAGTCATTCAAGTTGAATATCCAGTGGATGGAGAAGAACC  
 TCAAAGTCTCATGGTGGCTG

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

**Protein Sequence:**

>RG216948 representing NM\_175920  
 Red=Cloning site Green=Tags(s)

MIENSMFEEEPDVVDLAKPECLHLEPDEVEYEPGRSRLVLRGLGEHEMEEDEEDYESSAKLLGMSFMNR  
 SGLRNSATGYRQSPDGACSVSARTMVVCAFVIVVAVSVIMVIYLLPRCTFTKEGCHKKNQSIGLIQPF  
 ATNGKLPWAQIRLPTAVVPLRYELSLHPNLTSMTFRGSVTISVQALQVTWNIILHSTGHNISRVTFMSA  
 VSSQEKQAEILEYAYHGQIAIVAPEALLAGHNYTLKIEYSANISSYYGFYGFYSYDESNEKKYFAATQF  
 EPLAARSAPFCFDEPAFKATFIKIIIRDEQYALSNMPKKS SVLDDGLVQDEFSESVMSTYLVAFIVG  
 EMKNLSQDVNGLVSIYAVPEKIGQVHYALETTVKLLEFFQNYFEIQYPLKLDLVAIPDFEAGAMENWG  
 LLTFREETLLYDSNTSSMADRKLVTKIIAHELAHQWFGNLVTMKWVNDLWLNDFGATFMEYFSLEKIFKE  
 LSSYEDFLDARFKTMKDSLNSHPISSSVQSSEQIEEMFDSL SYFKGSSLLMLKTYLSEDFVQHAVVL  
 YLHNHSYASIQSDDLWDFNEVTNQTLVKRMMKTWTLQKGFPLVTVQKKGKELFIQQRFFLNMPKPEIQ  
 PSDTSYLWHIPLSYVTEGRNYSKYQSVSLLDCKSGVINL TEEVLWVKVINMNGYIVVHYADDDWEALIH  
 QLKINPYVLSKDRANL INNI FELAGLKVPLKRAFDL INYLGNNHTAPITEALFQTDLIYNLLEKLG  
 MDLASRLVTRVFKLLQNQIQQTWTDEGTPSMRELRSALLEFACTHNLGNCSTTAMKLFDDWMA SNGTQS  
 LPTDVMTTVFKVGA KTDKGWSFLLGKYISIGSEAEKNKILEALASSEDVRKLYWLMKSSLNNGDNFRQKL  
 SFIIRTVGRHFPGHLLAWDFVKENWNKL VQKFP LGSYTIQNI VAGSTYLFSTKTHLSEVQAFFENQSEAT  
 FRLRCVQEALV IQLNIQWMEKNL KSLTWWL

TRTRPLE – GFP Tag – V

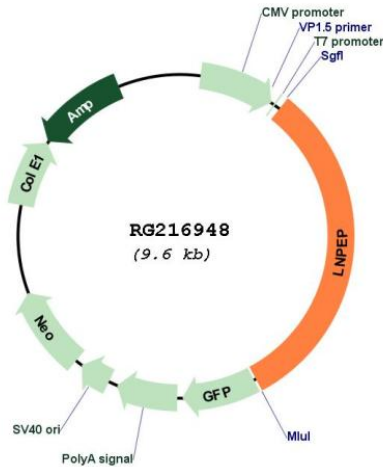
**Restriction Sites:**

Sgfl-MluI

Cloning Scheme:



Plasmid Map:



ACCN: NM\_175920

ORF Size: 3033 bp

OTI Disclaimer: 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](#)

<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_175920.4</a>
<b>RefSeq Size:</b>	4262 bp
<b>RefSeq ORF:</b>	3036 bp
<b>Locus ID:</b>	4012
<b>UniProt ID:</b>	<a href="#">Q9UIQ6</a>
<b>Cytogenetics:</b>	5q15
<b>Protein Families:</b>	Druggable Genome, Protease, Secreted Protein, Transmembrane
<b>Protein Pathways:</b>	Renin-angiotensin system
<b>Gene Summary:</b>	This gene encodes a zinc-dependent aminopeptidase that cleaves vasopressin, oxytocin, lys-bradykinin, met-enkephalin, dynorphin A and other peptide hormones. The protein can be secreted in maternal serum, reside in intracellular vesicles with the insulin-responsive glucose transporter GLUT4, or form a type II integral membrane glycoprotein. The protein catalyzes the final step in the conversion of angiotensinogen to angiotensin IV (AT4) and is also a receptor for AT4. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jul 2008]