

Product datasheet for **RG220692**

Leucyl cystinyl aminopeptidase (LNPEP) (NM_005575) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Leucyl cystinyl aminopeptidase (LNPEP) (NM_005575) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Leucyl cystinyl aminopeptidase
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:	>RG220692 representing NM_005575 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGAGCCCTTACCAATGATCGGCTTCAGCTCCCAGGAATATGATTGAAAACAGCATGTTTGAGGAAG
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GCCCCGGGGTTCCCGACTGCTGGTGCAGGGTCTTGGTGAGCATGAGATGGAGGAGGATGAAGAGGATTAT
GAGTCATCAGCAAAGCTGCTGGCATGCTCTTCATGAATAGAAGCTCAGGCCTTCGGAACAGTGAACCTG
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ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG220692 representing NM_005575
 Red=Cloning site Green=Tags(s)

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MEPFTNDRLQLPRNMIENSMEFEEDVVDLAKPECLHPLEPDEVEYEPGRSRLVRLGHEHEMEDEEDY
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CHKKNQSIGLIQPFATNGKLPWAQIRLPTAVVPLRYELSLHPNLTSMFRGVSITISVQALQVTWNIILH
STGHNISRVTFMSAVSSQEKQAEILEYAYHGQIAIVAPEALLAGHNYTLKIEYSANISSYYGFYGFYSY
DESNEKKYFAATQFEPLAARSAPCFDEPAFKATFIKIIRDEQYALSNMPKSSVVLDDGLVQDEFSE
SVKMSTYLVAFIVGEMKNLSQDVNGLVSIYAVPEKIGQVHYALETTVKLEFFQNYFEIQYPLKKLDLV
AIPDFEAGAMENWGLLTFREETLLYDSNTSSMADRKLVTKIIAHELHQWFGNLVTMKWVNDLWLNQFA
TFMEYFSLEKIFKELSSYEDFLDARFKTMKKDSLNSHPISSSVQSSEQIEEMFDSL SYFKGSSLLMLK
TYLSEDFVQHAVVLYLHNHSYASIQSDDLWDSFNEVTNQLDVKRMMKTWTLQKGFPLVTVQKKGKELFI
QQERFFLNMKPEIQPSDTSYLWHIPLSYVTEGRNYSKYQSVSLLDKKSGLINL TEEVLWVKVNIINMGYY
IVHYADDWEALIHQLKINPYVLSKDNRANL INNIFELAGLGKVPKRAFIDLINYLGNENHTAPITEALF
QTDLIYNLLEKLYMDLASRLVTRVFKLLQNQIQQTWTDEGTPSMRELSALLEFACTHNLGNCSTTAM
KLFDDWMAASNGTQSLPTDVMTTVFKVGAKTDKGSFLLGKYISIGSEAEKNKILEALASSEDVRKLYWLM
KSSLNGDNFRQTQKLSFIIRTVGRHFPGHLLAWDFVKENWNKLVQKFPPLGSYTIQNIIVAGSTYLFSTKTHL
SEVQAFENQSEATFRLRCVQEALVIQLNIQWMEKNLKSLLTWL
    
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TRTRPLE – GFP Tag – V

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_005575

ORF Size: 3075 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](#)

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:

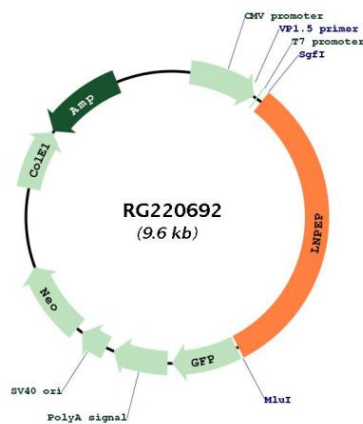
1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_005575.3](#)

RefSeq Size: 4470 bp

RefSeq ORF:	3078 bp
Locus ID:	4012
UniProt ID:	Q9UIQ6
Cytogenetics:	5q15
Domains:	Peptidase_M1
Protein Families:	Druggable Genome, Protease, Secreted Protein, Transmembrane
Protein Pathways:	Renin-angiotensin system
Gene Summary:	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]

Product images:



Circular map for RG220692