

Product datasheet for **RR204779**

Lonp1 (NM_133404) Rat Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lonp1 (NM_133404) Rat Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lonp1
Synonyms:	Lon; Prss15
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



[View online »](#)

ORF Nucleotide Sequence:

>RR204779 representing NM_133404
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCCCGCATCGCC

ATGGCGGCAAGCACAGGTTACGTGCGGCTGTGGGCTGCTGCGCGGTGCTGGGTTCTGCGCGCTCCGCTCT
 TGGCTGTACCGGAGGCCGAGTCCCGAGTGCCTCGGGTCTGGCTGCGCGAGGATGTCGGGTCTGCGA
 CACGTCAACTCCCTGGGGCGGCCGCTTCTATGGGCGGGGCCAGTGGCGGGGGCTGTGGGACGCGGGG
 AGCCGCGGTGGCAGCGACGAGACCTCCGAGGGCGGCTGGAGGACGGGGCCACGCGAGCAGCGGGGAAG
 GCCCGGTGTCACGGCCCTCGCGCTATGACCGTCCCGGATGTGTTTCTCACCTGCCGCTCATCGCCAT
 CTCCCGCAACCCGGTGTCCCGCTTTATCAAGATCGTGGAGGTTAAAAATAAGAAGTTGGTTGAGCTG
 CTGAGAAGGAAAGTCCGCTGGCACAGCCGTATGTTGGCTCTTCTTAAGAGAGATGATAACAATGAGT
 CAGACGTGGTGGAGACCTGGATGAGATCTACCATACGGGAACGTTGCTCAGATTATGAGATGCAGGA
 CCTCGGAGACAAGTTGCGCATGATCGTTACAGGCCACAGAAGGATTCACATCAGCCGGCAGCTGGAGGTG
 GAACCAGAGGGGCTGGAGCCAGAGGCAGAGAACAACAAAAGTCCAGGAGGAAGCTGAAGCGAGGCAAGA
 AAGAGGTCGGGGATGAGCTGGGTGCCAAGCCCCAGCTGGAGATGGTACTGAGGCTACCAGTGACACATC
 CAAAGAGGTGCTCATGGTGGAGTTGAGAATGTAGCCCATGAAGACTTTCAGGTCACAGAGGAAGTGAAG
 GCCCTGACTGCAGAGATCGTGAAGACCATTCGGGATATCATCGCCCTGAACCCCTGTACAGAGAGTCCG
 TGCTGCAGATGATGCAGGCAGGCCAGCGTGTGGTGGACAACCCCATCTACTTGAGCGACATGGGTGCCGC
 ACTCACTGGGGCTGAGTCCCATGAGCTGCAAGATGTGCTGGAAGAAACAAACATCCTTAAGCGGCTCTAT
 AAGGCCCTGTCTCTTTGAAGAAGGAGTTCGAGTTGAGCAAGCTTCAACAGCGCCTGGGGCGTGGAGTGG
 AGGAAAGATCAAGCAGACGCACAGGAAGTACCTGCTGCAGGAGCAGCTAAAGATCATCAAGAAAGAGTT
 GGGACTAGAGAAGGATGATAAAGATGCCATTGAGGAGAAGTTCCGGGAACGCTTAAAGGAGCTTGTGGTT
 CCCAAGCATGTGATGGACGTGGTATGATGAGGAGCTGAGCAAGCTGGCCCTACTGGACAACCACTCCTCTG
 AATTCAATGTCACTCGCAACTACCTGGACTGGCTGACGTCCATCCATGGGGCCGGCAGAGCGATGAGAA
 CTTAGACCTGGCTCGGGCCAGTCGGTGTGGAGGAGGACCACTATGGCATGGAGGATGTGAAGAAGCGA
 GTCTTGGAGTTCATTGCAGTCAGCCAGCTCCGAGGCTCCACACAGGGCAAGATCCTCTGCTTCCACGGCC
 CACCAGGTGTGGCAAGACCAGCATTGCACGCTCCATTGCCCGTGCCTTGGCCGTGAATACTTCCGCTT
 TAGTGTGGTGGCATGACAGATGTGGCAGAAATCAAGGGGCACAGGCGTACCTATGTGGGGCCATGCCT
 GGAAGATTATCCAGTGTCTGAAGAAAACCAAGACAGAGAACCATTAGTGTGATTGATGAGGTGGATA
 AGATTGGCCGAGGCTACCAAGGGGACCCGTATCAGCACTGTTGGAGTTGTTGGACCTGAGCAGAAATGC
 CAACTTCTGGACCACTACCTGGATGTGCCAGTGGACCTGTCAAAGGTGCTATTATCTGCACAGCCAAC
 GTCACTGACACTATACCGGAGCCACTAAGGGATCGCATGGAGATGATCAATGTGTGAGGCTATGTAGCAC
 AGGAGAAGCTGGCCATTGCAGAGCGGTACCTGGTGCACAGGCCCGCACCCCTGTGTGGCCTAGACGAGAG
 CAAGGCCCAACTGTCAGCGCAGTGTCACTCTACTCATCAAACAGTACTGCAGGGAAAGTGGTGTGCGC
 AACCTGCAGAAGCAGGTGGAGAAGGTGCTGCGCAAGGCTGCATAACAAGATTGTAAGTGGAGAGGCCCAGA
 CAGTGCACGTGACACCTGAGAACCTGCAAGACTTTGTAGGGAAGCCAGTGTTCACAGTGGAGCGCATGTA
 TGATGTCACGCCCTCTGGTGTGGTCAATGGGTTTGGCCTGGACTGCCATGGGAGGCTCCACATTGTTGCTG
 GAGACATCTTTAAGGAGGCCCGCCAGCCTAGTGGCAGCAAGGAGGACAAGGATGGCAGCCTAGAGGTGACAG
 GTCAGCTAGGAGATGTCATGAAAGAGAGTGCCCGCATAGCCTACACCTTTGCCCGTGCCTTCTGATGGA
 GCAGGACCCTGAAAATGACTTTCTGGTACATCCACATCCACCTGCATGTGCCTGAGGGCGCTACCCCC
 AAGGATGGCCCTAGTGCAGGTTGCACCATGTCACCTGCATTGCTGTCCCTAGCTCTGGGGCAGCCAGTGT
 TGCAGAACCTGGCCATGACTGGGAAAGTCTCCCTCACTGGTAAAGTGTGCTGTGGGTGGCATCAAGGA
 GAAGACCATTGCGGCTAAGCGTGCAGGAGTGCCTGCATCATTTTGCCTGCTGAGAACAGGAAGGACTTC
 TCAGACTTGGCTCCCTTATCACAGAGGGCCTGGAGGTTCACTTCGTGGAACACTACCGCGACATCTTCC
 GAATTGCCTTCCCTTGCAGAGCACCAGGAAGCACTGGCTGTGGAAGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RR204779 representing NM_133404
 Red=Cloning site Green=Tags(s)

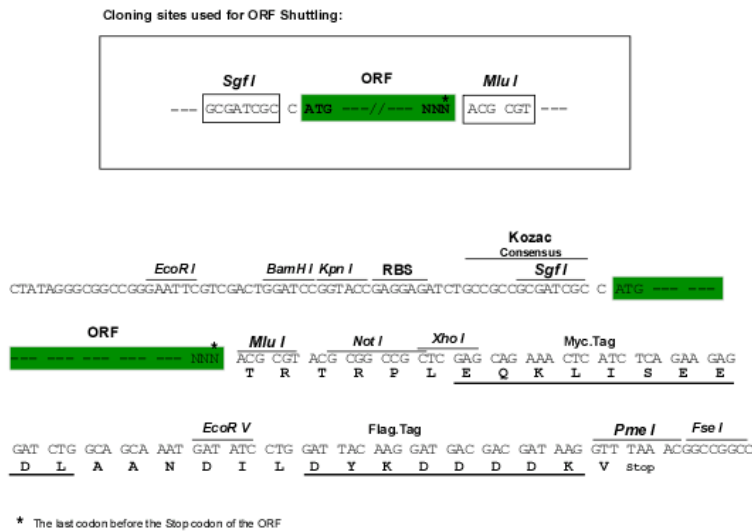
MAASTGYVRLWAAARCWVLRPLLAVTGGRVPSASGSWLRRCRVCDTSTPWGGRVPMGGGQWRGLWDAG
 SRGGSDETSEGGVEDGATASSGEGPVVVALAPMTVPDVPHLPLIAISRNPFVPRFIKIVEVKNKKLVEL
 LRRKVRLAQPYVGVFLKRDDNNEVDVESLDEIYHTGTFAQIHEMQDLGDKLRMIVTGHRRIHISRQLEV
 EPEGLEPEAENKQKSRRRLKRGKKEVGDDELGAKPQLEMVTEATSDTSKEVLMVEVENVAHEDFQVTEEVK
 ALTAEIVKTIIRDIIALNPLYRESVLQMMQAGQRVVDNPIYLSDMGAALTGAESHELQDVLEETNILKRLY
 KALSLLKKEFELSKLQQRLGREVEEKIKQTHRKYLLQEQLKIIKKELGLEKDDKDAIEEKFRERLKV
 PKHVMDVDEELSKLALLDNHSSEFNVTRNYLDWLT SIPWGRQSDENLDLARAQSVLEEDHYGMEDVKKR
 VLEFIAVSQLRGSTQGKILCFHGPPGVGKTSIARSIARALGREYFRF SVGGMTDVAEIKGHRRTYVGAMP
 GKIIQCLKKTENPLVLIDEVDKIGRGYQGDPSALLELLDPEQANFLDHYLDVPVDLSKVLFICTAN
 VTDTIPEPLRDRMEMINVSQYVAQEKLAIAERYLVPQARTLCGLDESKAQLSATVLTLLIKQYCRESGVR
 NLQKQVEKVLKAAYKIVSQAQTVHVTPENLQDFVGKPVFTVERMYDVTTPPGVVMGLAWTAMGGSTLTV
 ETSLRPQPSGSKEDKDGSLVETGQLGDMKESARIAYTFARAFLEQDPENDFLVTSHIHLHVPEGATP
 KDGPSAGCTIVTALLSLALGQPVLQNLAMTGEVSLTGKVLVPGGIKEKIIAAKRAGVTCIILPAENRKDF
 SDLAPFITEGLEVHFVEHYRDI FRIAFPLREHQEALAVER

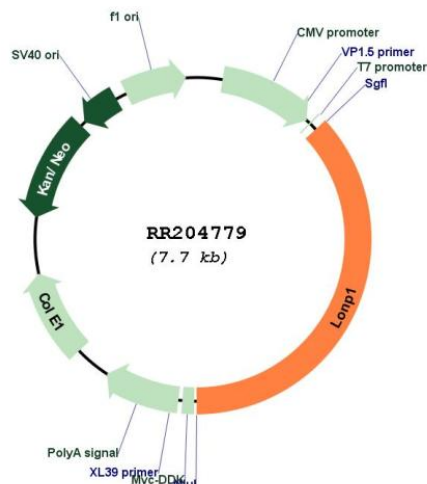
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



Plasmid Map:


ACCN: NM_133404

ORF Size: 2850 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_133404.1](#), [NP_596895.1](#)

RefSeq Size: 2969 bp

RefSeq ORF: 2853 bp

Locus ID: 170916

UniProt ID: [Q924S5](#)

Cytogenetics: 9q12

MW: 105.8 kDa

Gene Summary: mitochondrial ATP-dependent protease that displays increased expression under conditions of brain ischemia, hypoxia, and ER stress [RGD, Feb 2006]