

Product datasheet for **MG215882**

Lonp1 (NM_028782) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lonp1 (NM_028782) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Lonp1
Synonyms:	1200017E13Rik; LON; Prss15
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG215882 representing NM_028782
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGCGAGCACAGGCTACGTGCGGCTCTGGGCGCTGCGCGGTGCTGGTCTCGCGCGCCGCTGC
 TGCTGTACCGGAGGCCGGTCCCGAGCGCTCCGGTTCGTGGCTGCGCGAGGATGTCGGCCTGCGA
 CATGTAGCTCCCTGGGCGGCCGCTTCTCCCGCGGGTCCAGTGGCGGGGCTGTGGACTCGGGC
 AACCGCGTGGCAGCGACGAGACCTCCGAGGGCGTGGGAGGACGGGGCCACGGCGAGCACCGGGGAA
 GCCCGTGTGACAGCGCTCGCGCCATGACCGTCCCGGATGTGTTTCTCACCTGCCGCTCATGCCAT
 CACCCGAACCTGTGTTCCCGCTTTATCAAGATCGTGGAGTTAAAAATAAGAAGTTGGTTAGCTC
 CTGAGAAGGAAAGTCCGACTTGCACAGCCCTATGTTGGCTTCTCCTAAGAGAGATGACAACAATGAGT
 CGGACGTGGTGGAGACCTGGATGAAATCTACCATACGGGAACATTCGCTCAGATTCATGAGATGCAGGA
 CCTCGGAGACAAGTTGCGAATGATTGTCACTGGCCACAGAAGGATTCACATCAGCCGGCAGCTGGAGGTG
 GAACCAGAGGGGCTTGGCCAGAGGCAGAGAAACAAAAGTCCAGGAGGAAGCTGAAGCGAGGCAAGAAAG
 AGGTGGAGGATGAGCTGGGCCCAAGCCCCAGCTGGAGATGGTGACCGAGGCTGCCACTGACACATCCAA
 GGAGGTGCTCATGGTGGAGGTTGAGAAATGAGCCCATGAAGACTTCCAGGTACAGAGGAAGTGAAGGCC
 CTGACTGCAGAGATTGTGAAGACCATTCGGGATATCATCGCCTTGAACCTCTGTACAGAGAGTCCGTGC
 TGCAGATGATGCAGGCAGGCCAGCGTGTGGTGGACAACCCCATCTACTTGAGCGACATGGGTGCGGCACT
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 AAGATCATCCAGTGTCTGAAGAAGACCAAGACAGAGAACCGCTAGTGCTCATTGATGAGGTGGACAAGA
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 CTTCTGGACCACTACCTGGATGTGCCAGTGGATCTGTCCAAGGTGCTATTATCTGCACGGCCAATGTC
 ATTGACACCATCCAGAACCCTGAGGGACCGCATGGAGATGATCAATGTGTCTGGCTATGTAGCACAGG
 AGAAGCTGGCCATCGCAGAGCGGTACCTGGTGGCCACAGGCCCGCACCCCTGTGTGGCTAGATGAGAGCA
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 GACCATTGCGGCTAAGCGTGCAGGTGTGACCTGCATCATTCTGCCTGCTGAGAACAGAAAGGACTACTCG
 GATTTAGCTCCTTTTATCACAGAGGGCCTTGAAGTTCACCTCGTGAACACTATCGGGACATATCCCA
 TTGCCCTCCCGCGGAGAGCACAGGGAGGCACTGGCCGTGGAGAGA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >MG215882 representing NM_028782
 Red=Cloning site Green=Tags(s)

MAASTGYVRLWAAARCWVLRPPLLAVTGGRVPSASGSWLRRCRACDMSAPWGGRVLPGGVQWRGLWDSG
 NRGGSDETSEGAEDGATASTGEGPVVTALAPMTVPDVPHLPLIAITRNPVFPRFIKIVEVKNKKLVEL
 LRRKVRLAQPYVGVFLKRDDNNEVDVESLDEIYHTGTFAQIHEMQDLGDKLRMIIVTGHRRIHISRQLEV
 EPEGLEPEAEKQKSRRLKRGKKEVEDELGPKPQLEMVTEAATDTSKEVLMVEVENVAHEDFQVTEEVKA
 LTAEIVKTIRDIIALNPLYRESVLQMMQAGQRVVDNPIYLSDMGAALTGAEHELQDVLEETNILKRLYK
 ALSLLKKEFELSKLQQRLLGREVEEKIKQTHRKYLLQEQLKIIKKELGLEKDDKDAIEEFRRERLRELVVP
 KHVMDVVDEELSKLALLDNHSSEFNVTRNYLDWLT SIPWGRQSDENLDLARAQAVLEEDHYGMEDVKKRV
 LEFIAVSQLRGSTQGKILCFHGPPGVGKTSIARSIARALGREYFRFSVGGMTDVAEIKGHRRTYVGAMPG
 KIIQCLKKTENPLVLIDEVDKIGRGYQGDPSALLELLDPEQANFLDHYLDVPVDLSKVLFICTANV
 IDTIPEPLRDRMEMINVSQYVAQEKLAIAERYLVPQARTLCGLDESKAQLSAAVLTLLIKQYCRESGVRN
 LQKQVEKVLKAAKYIVSGEAQTVQVTPENLQDFVGKPVFTVERMYEVTTPPGVVMGLAWTAMGGSTLFE
 TSLRRPQPSGSKEDKDGSLVETGQLGDMKESARIAITYARAFLEMQDPENDFLVTSIHILHVPEGATPK
 DGPSAGCTIVTALLSLALGQPVQLNLAAMTGEVSLTGKVLVPGGIKEKTIAAKRAGVTCIILPAENRKDYS
 DLAPFITEGLEVHFVEHYRDIFFIAFPRREHREALAVER

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:

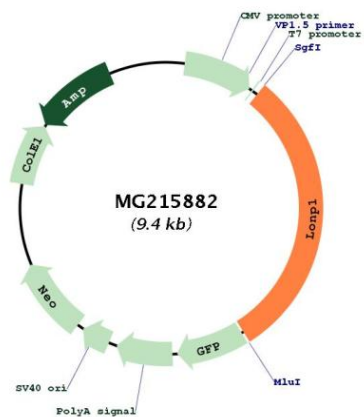


ACCN: NM_028782

ORF Size: 2847 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:	<ol style="list-style-type: none"> 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_028782.2 , NP_083058.2
RefSeq Size:	2970 bp
RefSeq ORF:	2850 bp
Locus ID:	74142
UniProt ID:	Q8CGK3
Cytogenetics:	17 D
Gene Summary:	ATP-dependent serine protease that mediates the selective degradation of misfolded, unassembled or oxidatively damaged polypeptides as well as certain short-lived regulatory proteins in the mitochondrial matrix. May also have a chaperone function in the assembly of inner membrane protein complexes. Participates in the regulation of mitochondrial gene expression and in the maintenance of the integrity of the mitochondrial genome. Binds to mitochondrial promoters and RNA in a single-stranded, site-specific, and strand-specific manner. May regulate mitochondrial DNA replication and/or gene expression using site-specific, single-stranded DNA binding to target the degradation of regulatory proteins binding to adjacent sites in mitochondrial promoters.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG215882