

Product datasheet for **SC318414**

LONP1 (NM_004793) Human Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: LONP1 (NM_004793) Human Untagged Clone
Tag: Tag Free
Symbol: LONP1
Synonyms: CODASS; hLON; LON; LonHS; LONP; PIM1; PRSS15
Mammalian Cell Selection: None
Vector: [pCMV6-XL5](#)
E. coli Selection: Ampicillin (100 ug/mL)

Fully Sequenced ORF: >OriGene sequence for NM_004793 edited
GGGCTATGGCGGCGAGCACTGGCTACGTGCGACTGTGGGGAGCGGCGGTGCTGGGTGC
TGC GGCGCCGATGCTGGCCGCCCGGGGGCGGTTCCCACTGCAGCAGGAGCGTGGT
TGCTCCGAGGCCAGCGGACCTGCGACGCCTCTCCTCCTTGGGCACTGTGGGGCCGAGGCC
CGGCAATTGGGGGCAATGGCGGGGTTTTGGGAAGCGAGCAGCCGCGGGGAGGCGCAT
TCTCGGGGGCGAGGACGCCTCCGAGGGCGGCGGAGGAAGGAGCCGCGGCGCGGGGG
GCAGCGGGGGCGCGGGGAAGGCCCGGTCAACGGCGCTCACGCCATGACGATCCCCG
ATGTGTTTCCGCACCTGCCGCTCATCGCCATCACCCGCAACCCGGTGTCCCGCGCTTTA
TCAAGATTATCGAGGTTAAAAAAGAAGTTGGTTGAGCTGCTGAGAAGGAAAGTTCGTC
TCGCCCAGCCTTATGTCGGCGTCTTTCTAAAGAGAGATGACAGCAATGAGTCGGATGTGG
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ACCTTGGGGACAAGCTGCGCATGATCGTCATGGGACACAGAAGAGTCCATATCAGCAGAC
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CAAAGCGGGGCAAGAAGGAGGCGGAGGACGAGCTGAGCGCCAGGCACCCGGCGGAGCTGG
CGATGGAGCCACCCCTGAGCTCCCGGCTGAGGTGCTCATGGTGGAGGTAGAGAACGTTG
TCCACGAGGACTCCAGGTACCGGAGGAGGTGAAAGCCCTGACTGCAGAGATCGTGAAGA
CCATCCGGGACATCATTGCCTTGAACCTCTCTACAGGGAGTCAGTGTGCAGATGATGC
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CCGGGGCCGAGTCCCATGAGCTGCAGGACGTCCTGGAAGAGCAATATTCCTAAGCGGC
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ACGAGGAGCTGAGCAAGCTGGGCCTGCTGGACAACCACTCCTCGGAGTTCAATGTCACCC
GCAACTACCTAGACTGGCTCACGTCCATCCCTTGGGGCAAGTACAGCAACGAGAACCTGG
ACCTGGCGGGGACAGGACGTCGTTGGAGGAAGACCACTACGGCATGGAGGACGTCGAAGA
AACGCATCCTGGAGTTCATTGCCGTTAGCCAGCTCCGCGGCTCCACCCAGGGCAAGATCC



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TCTGCTTCTATGGCCCCCTGGCGTGGGTAAAGACCAGCATTGCTCGCTCCATCGCCCCGG
CCCTGAACCGAGAGTACTTCCGCTTCAGCGTCGGGGGCATGACTGACGTGGCTGAGATCA
AGGGCCACAGGCGGACCTACGTGGGCGCCATGCCCGGGAAGATCATCCAGTGTTTGAAGA
AGACCAAGACGGAGAACCCCTGATCCTCATCGACGAGGTGGACAAGATCGGCCGAGGCT
ACCAGGGGACCCGTCGTGGCAGTGTGGAGCTGCTGGACCCAGAGCAGAATGCCAACT
TCCTGGACCACTACCTGGACGTGCCCCGTGGACTGTCCAAGGTGCTGTTTCATCTGCACGG
CCAAACGTCACGGACACCATCCCCGAGCCGCTGCGAGACCGTATGGAGATGATCAACGTGT
CGGGCTACGTGGCCCAGGAGAAGCTGGCCATTGCGGAGCGCTACCTGGTGCCCCAGGCTC
GCGCCCTGTGTGGCTTGATGAGAGCAAGGCCAAGCTGTTCATCGACGTGCTGACGCTGC
TCATCAAGCAGTACTGCCGCGAGAGCGGTGCCGCAACCTGCAGAAGCAAGTGGAGAAGG
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ACTTCTACGACCTGGCAGCCTTCATCACCGAGGGCCTGGAGGTGCACTTCGTGGAACACT
ACCGGGAGATCTTCGACATCGCCTTCCCGGACGAGCAGGCAGAGGCGCTGGCCGTGGAAC
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AGTGACCCAGATCCCAGGACCTCAGTCGGCTTAATCAGAGTGTGGCATAGAAGCTATTT
AATGATTAAGTCATTTGCAGTAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA
AAAAAAAAAAAAAAAAAAAA
```

Restriction Sites:

Please inquire

ACCN:

NM_004793

Insert Size:

3100 bp

OTI Disclaimer:

Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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:

The ORF of this clone has been fully sequenced and found to be a perfect match to NM_004793.2.

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_004793.2](#), [NP_004784.2](#)

RefSeq Size: 3111 bp

RefSeq ORF: 2880 bp

Locus ID: 9361

UniProt ID: [P36776](#)

Cytogenetics: 19p13.3

Domains: LON, AAA, AAA

Protein Families: Druggable Genome, Protease

Gene Summary: This gene encodes a mitochondrial matrix protein that belongs to the Lon family of ATP-dependent proteases. This protein mediates the selective degradation of misfolded, unassembled or oxidatively damaged polypeptides in the mitochondrial matrix. It may also have a chaperone function in the assembly of inner membrane protein complexes, and participate in the regulation of mitochondrial gene expression and maintenance of the integrity of the mitochondrial genome. Decreased expression of this gene has been noted in a patient with hereditary spastic paraplegia (PMID:18378094). Alternatively spliced transcript variants have been found for this gene. [provided by RefSeq, Feb 2013]
Transcript Variant: This variant (1) encodes the longest isoform (1).