

## Product datasheet for **MR222448**

### Lonp2 (NM\_025827) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Lonp2 (NM_025827) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Lonp2
Synonyms:	1300002A08Rik; AU015403; Lonp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide  
Sequence:

>MR222448 representing NM\_025827  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCCCGCATCGCC

ATGTCCTCCGTGAGCCCCATCCAGATCCCCAGCCGCTTCCGCTGCTGTTGACCCACGAGAGTGTGTTGC  
 TGCTGGCTCCACTATGCGCACAAAGTGTGGACACGGCCGCAACTTGACGCTGGTGGGAGCCGCTTGCT  
 CAAGGGCACGTCGTTGCAGAGCACCATTCTAGGAGTCATCCCAACACACCCGACCCGGCCAGCGACAG  
 CAGGACCTGCCACCATTGCACAGAATTGGAACGGCTGCCCTGGCAGTTCAGGTTGTGGGAGTAATTGGC  
 CCAAACCACACTACACTTACTGATCACAGGCTGTGCCGTTCCAGATTGTGCAGGTCTTAAAAGAGAA  
 GCCATATCCCGTGGCTGAAGTGGAGCAGCTGGACCGACTTGAGGAATTTCCCAATATCTGCAAAAAGCAGG  
 GAGGAGCTGGGAGAGCTGTCAGAGCAATTCTACAGATACGCAGTGCAGTTGGTTGAAATGTTGGATATGT  
 CCGTCCCTGCAGTTGCTAAATTGAGACGCTTTTAGATAATCTTCCAAGGGAAGCTCTACCAGACATTCT  
 AACTTCAATTATTCGAACAAGCAACAAAGAGAAGCTCCAGATCTTAGATGCCGTGAGCCTGGAGGATCGG  
 TTCAAGATGACCATACCTCTGCTTGTAGACAGATTGAAGGTCTGAAATTAATTCAGAAGACTCGCAAAC  
 CTAACAAGATGACGACAAGAGGGTTATAGCAATACGCCCCATCAGGAGGATTCCACACATCCCAGGAAC  
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 TGATCGCTGGACATTCGGGACGCCGGATTCTTGGACAATGACCATTATGCCATGGAAAACTGAAG  
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 CAGGATTGCACCTTGGGGTGTGTGTGACCACTGACATTTCGAGGGCACAGGCGGACCTATGTGGGCACT  
 ATGCTGCTGATCATCAATGGCTTGAAGACCGTTGGGTTAACAATCCAGTGTTCCTATTGGATGAGG  
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 CACAGGAGGAGAAGATAGAGATTGCCACAGGCACCTGATCCCTAAGCAGCTGGAGCAGCAGGCTGAC  
 TCCTCAGCAGATTCAGATCCCCAGCACACCCTTGCCATCATTACCAGATACACCAGAGAAGCAGGA  
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 CTGGAGTGGCAATAGGGTTAGCATGGACTCCCTTGGGTGGCAAAATCATGTTTGTGGAAGCAAGTAAAT  
 GGACGGTGAAGGCCAACTAACACTGACCGGCCAGCTTGGGACGTCATGAAGGAGTCTGCCATCTCGCC  
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 ACAACACAGACATCCATCTGCACCTCCAGCTGGAGCTGTACAAAAGATGGACCATCTGCTGGTGTAC  
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 ATTACGCTGAGAGGGCTTGTCTTCCAGTGGGTGGAATTAAGACAAAGTCTAGCAGCACACCGAGCAG  
 GACTGAAGCAGATCATAATCCGAGAGGAACGAAAAGGACCTTGAAGAGATCCCAGCAACGTCAGACA  
 GGATCTAAGTTTTGTACAGCAAGCTGCCTGGATGAAGTCTAAATGCAGCTTTTGTGGTGGCTTCTCT  
 GTCAAGACCAGACCTGGTCTCATTGACAGCAAATA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >MR222448 representing NM\_025827  
 Red=Cloning site Green=Tags(s)

MSSVSPIQIPSRLPLLLTHESVLLPGSTMRTSVDTARNLQLVRSRLKGTSLQSTILGVIPNTPDPASDT  
 QDLPLHRIGTAALAVQVVGSNWPKPHYTLITGLCRFQIVQVLKEKYPVAEVEQLDRLEEFNICKSR  
 EELGELSEQFYRYAVQLVEMLDMSVPAVAKLRRLDNLPREALPDILTSIIRTSNKEKLQILDVSLIEDR  
 FKMTIPLLVQRQIEGLKLLQKTRKPKQDDDKRVIAIRPIRRIPHIPGTLEDEEEEEEDNDIVMLEKKIRTS  
 SMPEQAHKVCVKEIKRLKMPQSMPEYALTRNYELMVLELPWNKSTDRDLDIRAARILLDNDHYAMEKLLK  
 RRVLEYLAVRQLKNLKGPILCFVGPPGVGKTSVGRSVAKTLGREFHRIALGGVCDQSDIRGHRRTYVGS  
 MPGRIINGLKTGVNPNVFLLEVDKLGKSLQGDPAALLEVLDPEQNHNFTHYLNVAFDLSQVLFIAI  
 ANTTATIPPALLDRMEIIQVPGYTQEEKIEIAHRHLIPKLEQHGHTPQQIQIPQHTTLAIITRYTREG  
 VRSLDRKFGAICRAVAVKVAEGQHKEAKLDRSDVADGEGCKEHVLEDAKPESISDTADLALPPEMPILID  
 SHALKDILGPPLYELVSEKLSQPGVAIGLAWTPLGGKIMFVEASRMDGEGQLTLTGQLGDMVKESAHLA  
 ISWLRNNAKYYHLTNAFGSFDLLDNTDIHLHFPAGAVTKDGPAGVTIVTCLASLFSRGLVRSDVAMTGE  
 ITRGLVLPVGGIKDKVLAHRAGLKQIIPQRNEKDLEEPSNVRQDL SFVTASCLDEVLNAAFDDGGFP  
 VKTRPGLIDSKL

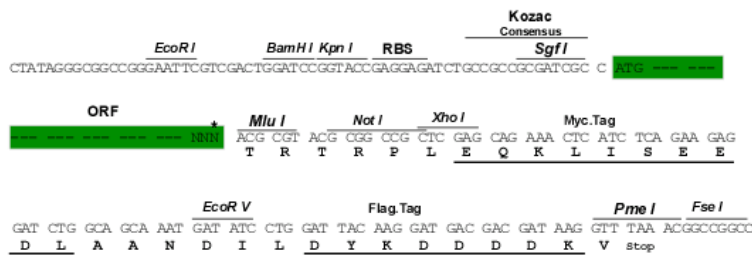
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: [https://cdn.origene.com/chromatograms/mm9095\\_g04.zip](https://cdn.origene.com/chromatograms/mm9095_g04.zip)

Restriction Sites: SgfI-MluI

Cloning Scheme:

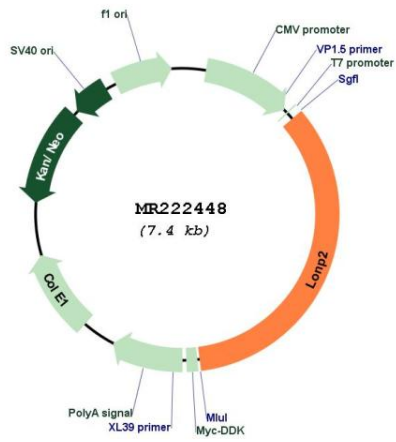
Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

<b>ACCN:</b>	NM_025827
<b>ORF Size:</b>	2556 bp
<b>OTI Disclaimer:</b>	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. <a href="#">More info</a>
<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_025827.3</a> , <a href="#">NP_080103.1</a>
<b>RefSeq Size:</b>	2936 bp
<b>RefSeq ORF:</b>	2559 bp
<b>Locus ID:</b>	66887
<b>UniProt ID:</b>	<a href="#">Q9DBN5</a>
<b>Cytogenetics:</b>	8 C3
<b>MW:</b>	94.5 kDa
<b>Gene Summary:</b>	ATP-dependent serine protease that mediates the selective degradation of misfolded and unassembled polypeptides in the peroxisomal matrix. Necessary for type 2 peroxisome targeting signal (PTS2)-containing protein processing and facilitates peroxisome matrix protein import. May indirectly regulate peroxisomal fatty acid beta-oxidation through degradation of the self-processed forms of TYSND1.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR222448