

Product datasheet for **MG222448**

Lonp2 (NM_025827) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Lonp2 (NM_025827) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Lonp2
Synonyms:	1300002A08Rik; AU015403; Lonp
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG222448 representing NM_025827
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGTCCTCCGTGAGCCCCATCCAGATCCCCAGCCGCCTTCGCTGCTGTTGACCCACGAGAGTGTGTTGC
 TGCTGGCTCCACTATGCGCACAAAGTGTGGACACGGCCCGCAACTTGCAGCTGGTGGAGCCGCTTGCT
 CAAGGGCACGTCGTTGCAGAGCACCATTCTAGGAGTCATCCCAACACACCCGACCCGGCCAGCGACACG
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 CACAGGAGGAGAAGATAGAGATTGCCACAGGCACCTGATCCCTAAGCAGCTGGAGCAGCAGGCTGAC
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 GGATCTAAGTTTTGTACAGCAAGCTGCCTGGATGAAGTTCTAAATGCAGCTTTTGTGGTGGCTTCTCT
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ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

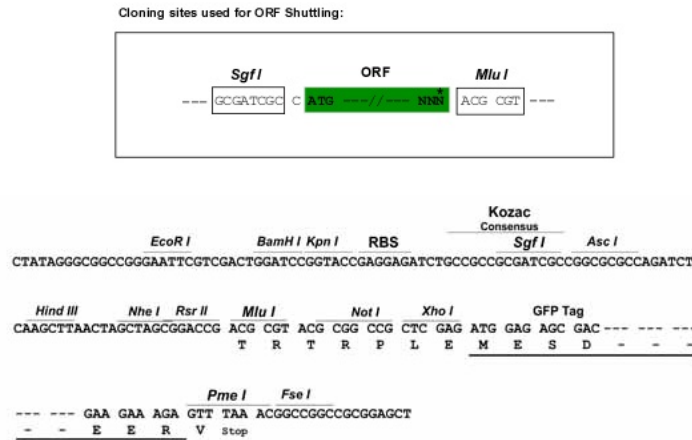
Protein Sequence: >MG222448 representing NM_025827
Red=Cloning site Green=Tags(s)

MSSVSPIQIPSRLPLLLTHESVLLPGSTMRTSVDTARNLQLVRSRLLKGTSLQSTILGVIPNTPDPASDT
QDLPLHRIGTAALAVQVVGSNWPKPHYTLLITGLCRFQIVQVLKEKYPVAEVEQLDRLEEFNICKSR
EELGELSEQFYRYAVQLVEMLDMSVPAVAKLRRLDNLPREALPDILTSIIRTSNKEKLQILDVAVSLEDR
FKMTIPLLRQIEGLKLLQKTRKPKQDDDKRVIAIRPIRRIPHIPGTLEDEEEEEEDNDIVMLEKKIRTS
SMPEQAHKVCVKEIKRLKKMPQSMPEYALTRNYELMVLPWNKSTTDRLDIRAARILLDNDHYAMEKLLK
RRVLEYLAVRQLKNNLKGPILCFVGPPGVGKTSVGRSVAKTLGREFHRIALGGVCDQSDIRGHRRTYVGS
MPGRIINGLKTGVNNPVFLLDEVKLGKSLQGDPAALLEVLDPEQNHNFTHYLNVAFDLSQVLFIAI
ANTTATIPPALLDRMEIIQVPGYTQEEKIEIAHRHLIPKLEQHGLTPQQIQIPQHHTLAIITRYTREAG
VRSLDRKFGAICRAVAVKVAEGQHKEAKLDRSDVADGEGCKEHVLEDAKPESISDTADLALPPEMPILID
SHALKDILGPPLYELEVSERLSQPGVAIGLAWTPLGGKIMFVEASRMDGEGQLTLTGQLGDMKESAHLA
ISWLRSNAKKYHLTNAFGSFDLLDNTDIHLHFPAGAVTKDGPVAGVTIVTCLASLFSGRLVRSDVAMTGE
ITLRLGLVLPVGGIKDKVLAHRAGLKQIIPQRNEKDLEEIPSNVRQDL SFVTASCLDEVLNAAFDDGGFP
VKTRPGLIDSKL

TRTRPLE - GFP Tag - V

Restriction Sites: Sgfl-MluI

Cloning Scheme:



ACCN: NM_025827

ORF Size: 2556 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_025827.3](#), [NP_080103.1](#)

RefSeq Size: 2936 bp

RefSeq ORF: 2559 bp

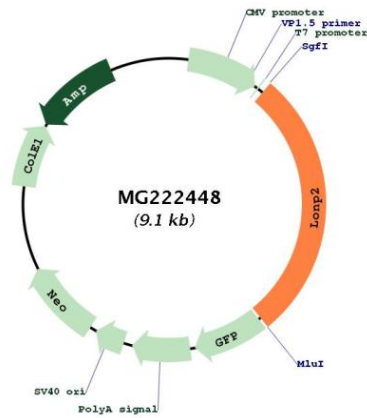
Locus ID: 66887

UniProt ID: [Q9DBN5](#)

Cytogenetics: 8 C3

Gene Summary: 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 MG222448