

## Product datasheet for **RG239606**

### LONP2 (NM\_001300948) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	LONP2 (NM_001300948) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	LONP2
Synonyms:	LONP; LONPL; PLON; PSLON
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide Sequence:**

>RG239606 representing NM\_001300948.  
 Blue=ORF Red=Cloning site Green=Tag(s)

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GCTCGTTTAGTGAACCGTCAGAATTTTGTAAACGACTCACTATAGGGCGGCCGGGAATTCGTGACTG
GATCCGGTACCGAGGAGATCTGCCGCCACGATCGCC
ATGTCATCAGTGAGCCCCATCCAGATCCCCAGTCGCCTCCCGCTGCTGCTCACCCACGAGGGCGTCTCTG
CTGCCCGGCTCCACCATGCGCACCGACTCGGCTCGGCCCGCAACCTGCAGCTGGTGGAGCCGCCTT
CTGAAGGGCACGTCGCTGCAAAGCACCATCCTGGGCGTCATCCCCAACACGCCTGACCCCGCAGCGAC
GCGCAGGACCTGCCGCCCTGCACAGGATTGGCACAGCTGCACTGGCCGTTCAAGTTGTGGGCAGTAAC
TGGCCCAAGCCCCACTACACTCTGTTGATTACAGGCTATGCCGTTTCCAGATTGTACAGGTCTTAAAA
GAGAAGCCATATCCATTGCTGAAGTGGAGCAGTTGGACCGACTTGAGGAGTTTCCCAACACCTGTAAA
ATGAGGGAGGAGCTAGGAGAATATCAGAGCAGTTTTACAATATGCAGTACAAATTTAGATGCTGTG
AGCCTAGAGGAGCGTTCAAGATGACTATACCACTGCTTGTGACACAAATGAAGCCTGAAATTGCTT
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ACACATATCTCAGGTACTTTAGAAGATGAAGATGAAGATAATGATGACATTGTCATGCTAGAG
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AGCAAACCTG
ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAAAC
```

**Protein Sequence:** >Peptide sequence encoded by RG239606  
 Blue=ORF Red=Cloning site Green=Tag(s)

MSSVSPIQIPSRLPLLLTHEGVLLPGSTMRTSVDSARNLQLVRSRLLKGTSLQSTILGVIPNTPDPASD  
 AQDLPLHRIQTAALAVQVVGSNWPKPHYTLITGLCRFQIVQVLKEKPYPIAEVEQLDRLEEFNTCK  
 MREELGELSEQFYKYAVQILDVAVSLEERFKMTIPLLVRQIEGLKLLQKTRKPKQDDDKRVI AIRPIRRI  
 THISGTLEDEDEDEDNDIVMLEKKIRTSSMPEQAHKVCVKEIKRLKKMPQSMPEYALTRNYLELMVEL  
 PWNKSTTDRLDIRAARILLDNDHYAMEKLLKRVLEYLAVRQLKNNLKGPIILCFVGPVGVGKTSVGRSVA  
 KTLGREFHRIALGGVCDQSDIRGHRRTYVGSMPGRIINGLKTGVNPNVFLLDKLVGKSLQGGPAAA  
 LLEVLDPEQNHNFTHYLNVAFDLSQVLFATANTTATIPAALLDRMEIIQVPGYTQEEKIEIAHRHLI  
 PKQLEQHGLTPQQIQIPQVTTLDIITRYTREAGVRSRDLRKLGAICRAVAVKVAEGQHKEAKLDRSDVTE  
 REGCREHILEDEKPEISDITDLALPPEMPILIDFHAKDILGPPMYEMEVSRQLSQPGVAIGLAWTPL  
 GGEIMFVEASRMDGEGQLTLTGQLGDMKESAHLAISWLRSNAKKYQLTNAFGSFDLLDNTDIHLHFPA  
 GAVTKDGPSAGVTIVTCLASLFSGRLVRSVAMTGEITLRLGLVLPVGGIKDKVLAHRAGLKQVIIPRR  
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**TRTRPLEMESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPEQGRMTNKMSTKGALTFSPYLLSHV**  
**MGYGFYHFGTYPSTYENPFLHAINNGGYTNRIEKYEDGGVLHVSFSYRYEAGRVIGDFKVMGTGFPEP**  
**SVIFTDKIIIRSNAIVEHLHPMGDNDLDGSFTRTFSLRDGGYSSVVDSMHFKSAIHPISILQNGGPMFA**  
**FRRVEEDHSNTELGIVEYQHAFKTPDADAGEERV**

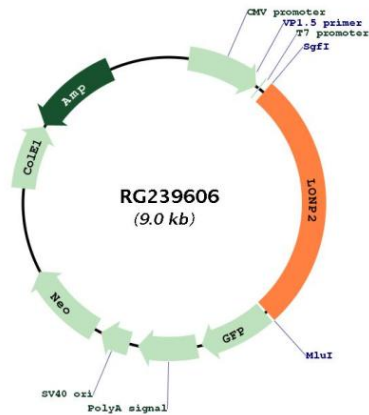
**Restriction Sites:** Sgfl-Mlul



RefSeq Size: 4826 bp  
 RefSeq ORF: 2427 bp  
 Locus ID: 83752  
 UniProt ID: [Q86WA8](#)  
 Cytogenetics: 16q12.1  
 Protein Families: Druggable Genome, Protease  
 MW: 90.1 kDa

**Gene Summary:** In human, peroxisomes function primarily to catalyze fatty acid beta-oxidation and, as a by-product, produce hydrogen peroxide and superoxide. The protein encoded by this gene is an ATP-dependent protease that likely plays a role in maintaining overall peroxisome homeostasis as well as proteolytically degrading peroxisomal proteins damaged by oxidation. The protein has an N-terminal Lon N substrate recognition domain, an ATPase domain, a proteolytic domain, and, in some isoforms, a C-terminal peroxisome targeting sequence. Alternative splicing results in multiple transcript variants encoding distinct isoforms. [provided by RefSeq, Jan 2017]

### Product images:



Circular map for RG239606