

## Product datasheet for **RN213287**

### Clpx (NM\_001007803) Rat Untagged Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Clpx (NM_001007803) Rat Untagged Clone
Tag:	Tag Free
Symbol:	Clpx
Synonyms:	MGC94617
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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**Fully Sequenced ORF:** >RN213287 representing NM\_001007803  
 Red=Cloning site Blue=ORF Orange=Stop codon

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTCCAGTTGCGGCGCTTGTACCTGCGGCGCTGCGGCTGCCCGCTTCTCACCACCTCGCTCACCTCCG  
 CGCAGAGAGGTATTTCTTGTGGGCGCATTTCATGTGCCAGTTTTAGGAAGACTGGGACCTTGGACTCA  
 GATTCTGCGCAGAGCTCCTCTTAGAACCTTTTCAGAAACACCAGCATACTTTGCCTCAAAAAGATGGGACA  
 AACAAAGGATGGCTCCGGAGATGGAAATAAGAAATCAGTGAAGGAAGCAGCAAAAAATCAGGCTCTG  
 GGAATTCGGGAAAGGTGAAACCAGCTTCGCTGTCTAAATGTGGCGACTTGTGCACACACGTAGAGAC  
 CTTTGTGTCTCCACGCGTTTTGTTAAGTGTGAAAAATGTCATCATTTTTTCGTTGTGTGTGCGAAGCG  
 GACTCAAAGAAAAGCATAATTAAGAACCAGAGTCAGCCGAGAGGCCGTGAAGTTGGCATTCCAGCAGA  
 AACCCCTCCACCCCAAAAAAGATCTATAACTACCTCGACAAGTATGTGGTTGGCCAGTCGTTTGTAA  
 GAAAGTCTTTCAGTTGCCGTATAATCATTATAAGAGAATATAATAATATTCAGCTAATCTGAGA  
 CAGCAAGCAGAGTTGAGAAGCAGACATCATTAAACCTAGAGAGTTAGAAATAAGAAGACGGGAGGATG  
 AGTACAGATTTACAAAGTTGCTTCAGATTGCTGGAATTAGCCACATGGCAATGCCTTGGGAGCATCTAT  
 GCAGCAGCAGGGAAGTCAGAAAATGCCTCAGGAAAAACAGGAGGCGAAGTACTAGATTCTCCTCACGAT  
 GATATAAAACTTGAAAAAGTAATTTCTGCTGCTTGGACCAACTGGATCAGGTAACCCCTGCTGGCAC  
 AAACCTTAGCTAAATGCCTTGATGTTCCCTTTGCTATCTGTGACTGTACAACCTTGTACTCAGGCTGGATA  
 TGTAGGTGAAGATTTGAATCTGTGATTGCCAACTACTCCAGGATGCCAATTACAATGTGGAGAAAGCA  
 CAACAAGGAATTGCTTTCTGGATGAAGTAGATAAGATTGGCAGTGTACCAGGCATTATCAGTTACGGG  
 ATGTAGGTGGAGAAGCGTTTCAGCAAGGTTTACTGAACTTCTAGAAGGCACAATAGTCAATGTTCCAGA  
 AAAGAATTCTCGAAAGCTACGTGGAGAGACAGTTCAAGTCGATACAACAATATCTTGTGTTGGCATCT  
 GGTGCCTTCAATGGCTTAGACAGAATCATCAGTAGGAGGAAAAATGAAAAGTATCTTGGATTGGAACAC  
 CATCTAACCTGGGGAAGGGCAGAAAGGCTGCAGCTGCTGCCGATCTTGCTAATCGAAGTGGAGAATCCAA  
 CACTCATCAGGACATTGAAGAGAAAGATCGGTTACTCCGCCATGTGGAAGCCAGAGATCTTATTGAGTTT  
 GGCATGATACCGGAGTTTGTGGACGGCTGCCTGTTGTGGTTCCTTGCACAGCCTAGATGAAAAGACGC  
 TTGTGCAGATACTGACTGAGCCACGGAATGCTGTGATTCTCAATATCAGGCCTATTACAGCATGGATAA  
 GTGTGAATTGAATGTTACTGAGGATGCTTTGAAAGCCATAGCTAGATTGGCACTGAAAAGAAAAACAGT  
 GCACGAGTCTTCGGTCGATAATGAAAAGCTGTTACTAGAACCAATGTTTGAAGTTCTAATTCTGACA  
 TTGTATGTGTGGAGTTGACAAAGAAGTAGTAGAAGGCAAAAAGGAACAGGATACATTCGGGCTCCATC  
 GAAAGAGTCTCGGAAGAGGACTATGACTCTGGAGTGGAGGAGGACGGATGGCCCTCGCCAAGCCGATGCT  
 GCAAAATAGCTAA

AG**CGGACCG**ACGCGTACGCGCCGCTCGAGCAGAAAATCATCTCAGAAGAGGATCTGGCAGCAAATGATATCC  
 TGGATTACAAGGATGACGACGATAAGGTTTAA

**Restriction Sites:** SgfI-RsrII

**ACCN:** NM\_001007803

**Insert Size:** 1902 bp

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

**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\\_001007803.1](#), [NP\\_001007804.1](#)

**RefSeq Size:** 1902 bp

**RefSeq ORF:** 1902 bp

**Locus ID:** 300786

**UniProt ID:** [Q5U2U0](#)

**Cytogenetics:** 8q24

**Gene Summary:** ATP-dependent specificity component of the Clp protease complex. Hydrolyzes ATP. Targets specific substrates for degradation by the Clp complex. Can perform chaperone functions in the absence of CLPP. Enhances the DNA-binding activity of TFAM and is required for maintaining a normal mitochondrial nucleoid structure. ATP-dependent unfoldase that stimulates the incorporation of the pyridoxal phosphate cofactor into 5-aminolevulinate synthase, thereby activating 5-aminolevulinate (ALA) synthesis, the first step in heme biosynthesis. Important for efficient erythropoiesis through upregulation of heme biosynthesis.[UniProtKB/Swiss-Prot Function]