

Product datasheet for **MG220133**

Clpx (NM_011802) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Clpx (NM_011802) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Clpx
Synonyms:	AU014732; E330029I21
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>MG220133 representing NM_011802
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGTCCAGTTGCGGCGCTTGTACCTGCGGCGCTGCGGCCGCCCGCTTCTCACCCTTCGCTCACCTCCG
 CGCAGAGAGGTATTTCTGTGGCGAATCCATGTGCCAGTGTTAGGAAGACTGGGACGACCTTGGACGC
 TCAGGCTCTGCGCAGAGCTCCTCTTAGAACCTTTTCAGAAACACCAGCATACTTTGCCTCAAAGACGGG
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 CTCAAAGAGTCTCTGAAGAGGAATATGACTCTGGAGTGGAGGAGGATGGATGGCTCGTCAAGCGGAT
 GCTGCAACACAGC

AG**CGGACCG**ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>MG220133 representing NM_011802
 Red=Cloning site Green=Tags(s)

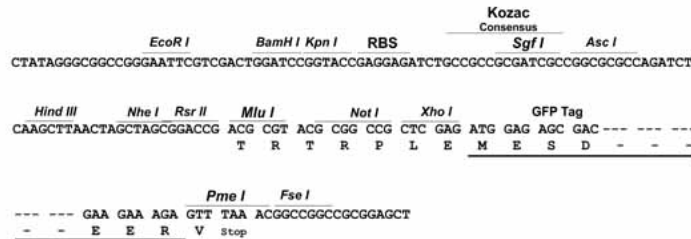
MSSCGACTCGAAAARLLTSLTSAQRGISCRIHVPVLRGRLGTTLDAQALRRAPLRTFSETPAYFASKDG
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 GARGLRSIMEKLLLEPMFEVPSNDIVCIVEVDKEVVEGKKEPGYIRAPSKESSEEEYDSGVEEDGWPRQAD
 AANS

SGP**TRRRLE** - GFP Tag - V

Restriction Sites: SgfI-RsrII

Cloning Scheme:

Cloning sites used for ORF Shuttling:



ACCN: NM_011802

ORF Size: 1902 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_011802.3](#), [NP_035932.2](#)

RefSeq Size: 2851 bp

RefSeq ORF: 1905 bp

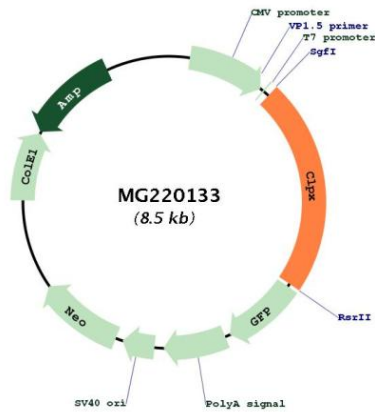
Locus ID: 270166

UniProt ID: [Q9JHS4](#)

Cytogenetics: 9 35.22 cM

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 (PubMed:10347188). 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 (By similarity).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MG220133