

Product datasheet for **RC233061**

CLPB (NM_001258394) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CLPB (NM_001258394) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CLPB
Synonyms:	ANKCLB; HSP78; MEGCANN; MGCA7; SKD3
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Cell Selection:	Neomycin



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ORF Nucleotide
Sequence:

>RC233061 representing NM_001258394
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGGATCGCC**

ATGCCTCGCGGCTGCCACTTGGGGACGCTTCCTGGTCCCGAAGAACAACCTCCAGGACAGGACAGCTGG
AACGGGGTCCCCAGCAGGGCCGGACTGGGCATGTGCGCCCTGGCCGACGCGCTGGTGGTTATTGCTACA
GCAAGAGTCCGTCCAACAAGGATGCAGCCCTGTTGGAAGCTGCCCGTCCAACAATATGCAAGAAGTCAG
CAGCCCCAAGAGACTGCAAGAATGATGCTCAGTCAAGAAGCTGGGCAGGGCTGAATGCTGGAGTCTCAC
TGAAGAACACCAAGATTTCTCTCTGAATGGCCCTCAGGCTGTTGTCAGAAGTGCAGATGTCAATGC
AAAGCACAGACTGGCTGGACAGCACTCATGGTGGCAGCCATCAACCGAAACAACAGTGTGGTACAGGTC
CTGCTTGTGCTGGGGCTGATCCAAACCTTGGAGATGATTTAGCAGTGTTCACAAGACTGCCAAGGAAC
AGGGAATCCATTTTGGAAAGATGGGGACAGGACGGTGAAGCCGGCACATCACAAACAGTGGACAAG
TGCCCTGGAGTTCAGGAGATGGCTAGGACTCCCCGCTGGCGTCTGATCACCCGAGAGGATGACTTCAAC
AACAGGCTGAACAACCGGCCAGTTTCAAGGGCTGCACGGCCTTGCACTATGCTGTTCTTGTGATGACT
ACCGCACTGTCAAGGAGCTGCTTGTGAGGAGCAACCCCTGCAGAGGAATGAAATGGGACACACACC
CTTGGATTATGCCCGAGAAGGGGAAGTGAAGCTTCTGAGGACTTCTGAAGCCAAGTACCAAGAGAAG
CAGCGGAAGCGTGAGGCTGAGGAGCGGCCGCTTCCCCCTGGAGCAGCGACTAAAGGAGCACATCATTG
GCCAGGAGAGCGCCATCGCCACAGTGGGTGCTGCGATCCGGAGGAAGGAGAATGGCTGGTACGATGAAGA
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AAATATATGCACAAGATGCTAAAAAGGGCTTCATCAGGCTGGACATGTCCGAGTTCAGGAGCGACACG
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GTTGAAGCAGTGCCCAATGCTGTGGTGTCTTTGATGAAGTAGACAAGGCCATCCAGATGTGCTCACC
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GGAATAAATCTGGGCCAAGAGAGCCAAGCAAAGGCACAACATCACGCTGCTCTGGACCGCGAGGTG
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GGTGGAGGACTCAGACAAGCAGTACTCAAAGCCAGAAGTGCCTCACCCAGGCTGAGAAGCGCCTC
CCCAAGCTGCGTCTGGAGATCATCGACAAGGACAGCAAGACTCGCAGACTGGACATCCGGGCACCACTGC
ACCCTGAGAAGGTGTGCAACACCATC

ACGCGTACGCGGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence: >RC233061 representing NM_001258394
 Red=Cloning site Green=Tags(s)

MPRGCHLGTPSWSRRNTPRTGQLERGPQQGRTGHVPRGRSAGGSLLQQESVQQGCSPVGS CPCQQYARSQ
 QPQETAKNDAQSRSWAGLNAGVSLKNTKISSSEWPLRLLSEGADVNAKHRLGWTALMVAAINRNNSVVQV
 LLAAGADPNLGDDFSSVYKTAKEQGIHSLLEDGGQDGASRHITNQWTSALFRRWLGLPAGVLITREDDFN
 NRLNRRASFKGCTALHYAVLADDYRTVKELLDGGANPLQRNEMGHTPLDYAREGEVMKLLRTSEAKYQEK
 QRKREAEERRRFPLEQRLKEHIIQESAIATVGAAIRKENGWYDEEHPLVFLFLGSSGIGKTELAKQTA
 KYMHKDAKKGFIRLDMSEFQERHEVAKFIGSPPGYVGHHEGGQLTKKQCPNAVVLDFEVDKAHPDVL
 IMLQLFDEGRITDGKGTIDCKDAIFIMTSNVASDEIAQHALQLRQEALEMSRNRIENLGDVQISDKIT
 ISKNFKENVIRPILKAHFRRDFLGRINEIVYFLPFCHSELIQLVNKELNFWAKRAKQRHNITLLWDREV
 ADVLVDGYNVHYGARSIKHEVERRVVNQLAAAYEQDLLPGGCTLRITVEDSDKQLLKSPELPSPAQEKRL
 PKLRLEIIDKDSKTRRLDIRAPLHPEKVCNTI

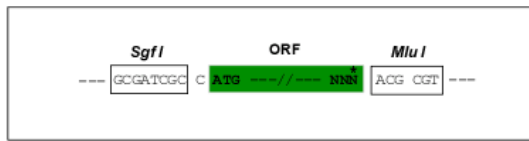
TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

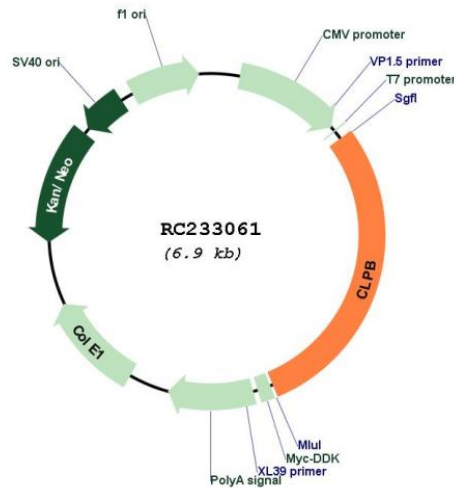
SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

Plasmid Map:


ACCN: NM_001258394

ORF Size: 1986 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_001258394.2](#)

RefSeq Size: 3379 bp
RefSeq ORF: 1989 bp
Locus ID: 81570
UniProt ID: [Q9H078](#)
Cytogenetics: 11q13.4
MW: 75 kDa

Gene Summary: This gene belongs to the ATP-ases associated with diverse cellular activities (AAA+) superfamily. Members of this superfamily form ring-shaped homo-hexamers and have highly conserved ATPase domains that are involved in various processes including DNA replication, protein degradation and reactivation of misfolded proteins. All members of this family hydrolyze ATP through their AAA+ domains and use the energy generated through ATP hydrolysis to exert mechanical force on their substrates. In addition to an AAA+ domain, the protein encoded by this gene contains a C-terminal D2 domain, which is characteristic of the AAA+ subfamily of Caseinolytic peptidases to which this protein belongs. It cooperates with Hsp70 in the disaggregation of protein aggregates. Allelic variants of this gene are associated with 3-methylglutaconic aciduria, which causes cataracts and neutropenia. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Apr 2015]