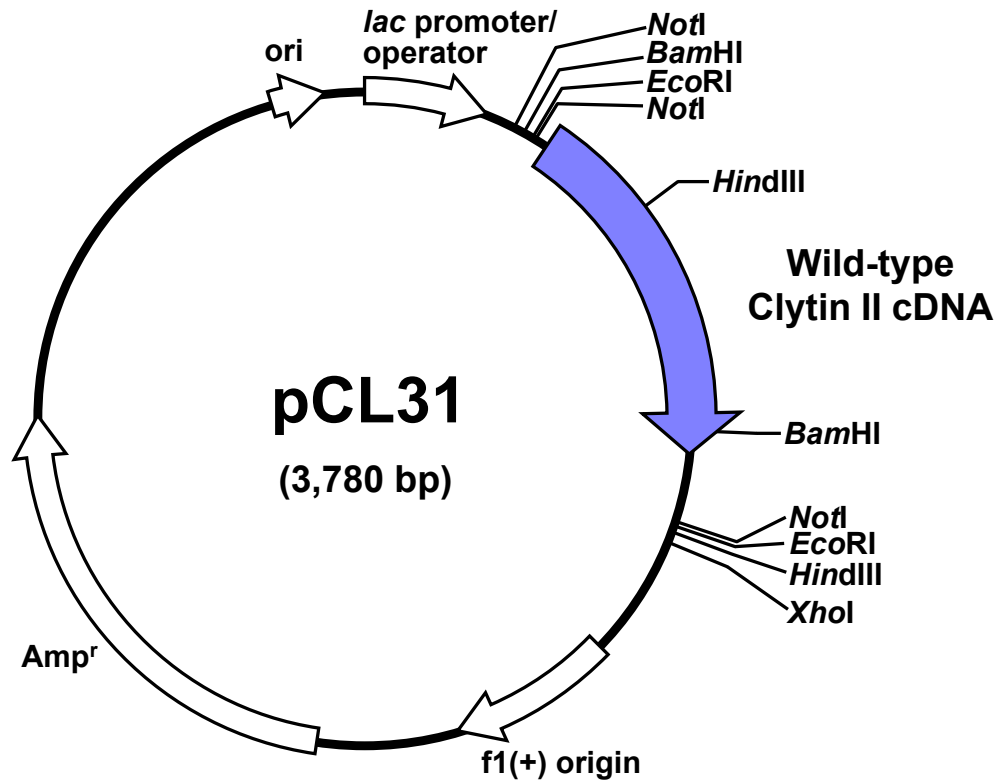


pCL31	
Cat. No.	P-009
Gene/Insert name:	Wild-type Clytin II (<i>C. gregaria</i>)
Vector backbone:	pBluescript SK
Vector type:	<i>E. coli</i>
Backbone size w/o insert (bp):	2,958
Bacterial resistance:	Ampicillin
Growth strain:	JM83
Growth temperature (°C):	37
Growth instructions:	pCL31 is resistant to ampicillin (50 µg/mL)
High or low copy:	High copy
Vector map:	pCL31
Coding sequence:	Nucleotide sequence & Amino acid sequence
Plasmid sequence:	pCL31 (3,780 bp)
Restriction enzyme list:	Restriction enzyme sites of pCL31
GenBank Accession No.:	AB360785
Size:	10 µg
Terms and Licenses:	MTA
Laboratory Reagent For Research Use Only	

Ca²⁺-Binding Photoprotein, Clytin II

Cat. No. P-009

Name: pCL31
Insert: Wild-type Clytin II cDNA
Vector: pBluescript SK



• DNA fragment:

M S A L - - - F V P ***
ATG-TCG-GCT-TTA-.....-TTT-GTT-CCC-TAA

• Feature for pCL31:

Residue	Source	Comments
1-331	1-331	pBluescript SK backbone
1-230	1-230	<i>lac</i> promoter/operator
356-1,012	1-657	Wild-type Clytin II ORF
1,148-3,780	326-2,958	pBluescript SK backbone
1,410-1,716	588-894	f1(+). origin
3,607	2,785	ori: Origin of replication
1,979-2,839	1,157-2,017	Amp ^r : Ampicillin resistance gene

Ref.

- 1) Clytin II amino acid seq. & cDNA seq.: GenBank Accession No. AB360785
Inouye, S. *J. Biochem.* (2008) 143: 711-717.

Gene coding region (ORF: Clytin II)

Nucleotide sequence

GAATTTCGCGGCCGCAAAATCGTCTTCTTTCC**ATGTCGGCTTTAGCTGCAAGATCAAGATTGCAACGCACAG**
CAAATTTTCACACCAGCATACTGTTGGCTACAGATTCAAAATACGCGGTCAAACTCGATCCTGATTTTGC
AAATCCAAAATGGATCAACAGACACAAATTTATGTTCAACTTTTTGGACATAAACGGTAATGGGAAAATC
ACATTAGATGAAATCGTCTCCAAAGCTTCAGACGACATTTGTGCTAAACTGGATGCAACACCAGAACAGA
CCAAACGTCACCAGGATGCTGTTGAAGCGTTTTTCAAGAAAATGGGCATGGATTATGGTAAAGAAGTTGC
ATTCCAGAATTTATTAAGGGATGGGAAGAGTTGGCCGAACACGACTTGGAACTCTGGTCTCAAAACAAA
AGTACATTGATCCGTGAATGGGGAGATGCTGTTTTCGACATTTTCGACAAAGACGCAAGTGGCTCAATCA
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GTTCAAACATTGTGATTTGGACAACAGTGGCAAACCTTGATGTTGATGAGATGACCAGGCAACATTTAGGC
TTCTGGTACACATTGGATCCAACCTTCTGATGGTCTTTATGGCAATTTTGTTCCTTAA**GAAGCGTTCAATT**
AAAAACGCTAAACATTGTTCAAGTTGTAATAATATATTCATTTTCATTCCATTTCAATAAATTAGTATTTA
TAAATTTGTATCATAAATGATCCATGTTGTAAACTAAATAAGGCGGCCGCGAATTC

Amino acid sequence

EF**AAANRLLS****MS****SALAARSRLQRTANFHTSILLATDSKYAVKLDPDFANPKWINRHKFMFNFLDINGNGKI**
TLDEIVSKASDDICAKLDATPEQTKRHQDAVEAFFKKMGMDYGKEVAFPEFIKGWEELAEHDLELWSQNK
STLIREWGDVAFDIFDKDASGSI**SLDEWKAYGRISGICPSDEDAEKTFKHCDLNSGKLDVDEMTRQHLG**
FWYTLDP**TS****DGLYGNFVP***

pCL31 (3,780 bp)

GCGCCCAATACGCAAACC GCCTCTCCCCGCGCGTTGGCCGATTCATTAATGCAGCTGGCAGCAGAGGTTT
CCCGACTGGAAAAGCGGGCAGTGAGCGCAACGCAATTAATGTGAGTTAGCTCACTCATTAGGCACCCCAGG
CTTTACACTTTATGCTTCCGGCTCGTATGTTGTGTGGAATTTGTGAGCGGATAACAATTTACACAGGAAA
CAGCTATGACCATGATTACGCCAAGCTCGAAATTAACCCCTACTAAAGGGAACAAAAGCTGGAGCTCCAC
CGCGGTGGCGGCCGCTCTAGAAGTAGTGGATCCCCCGGGCTGCAGGAATTCGCGGCCGCAAATCGTCTTC
TTTCC**ATGT**CGGCTTTAGCTGCAAGATCAAGATTGCAACGCACAGCAAATTTTTCACACCAGCATACTGTT
GGCTACAGATTCAAAATACGCGGTCAAACCTCGATCCTGATTTTGC AAAATCCAAAATGGATCAACAGACAC
AAATTTATGTTCAACTTTTTGGACATAAACGGTAATGGGAAAATCACATTAGATGAAATCGTCTCCAAAG
CTTCAGACGACATTTGTGCTAAACTGGATGCAACACCAGAACAGACC AAAACGTCACCAGGATGCTGTTGA
AGCGTTTTTCAAGAAAATGGGCATGGATTATGGTAAAGAAGTTGCATTTCCAGAATTTATTAAGGGATGG
GAAGAGTTGGCCGAACACGACTTGGAACTCTGGTCTCAAAAACAAAAGTACATTTGATCCGTGAATGGGGAG
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ACGAATCTCTGGAATCTGTCCATCAGACGAAGACGCTGAGAAGACGTTCAAACATTTGTGATTTGGACAAC
AGTGGCAAACCTTGATGATGAGATGACCAGGCAACATTTAGGCTTCTGGTACACATTTGGATCCAACCT
CTGATGGTCTTTATGGCAATTTGTTCCCT**TA**GAAAGCGTTCAATTA AAAACGCATAAACATTTGTTCAAGTTG
TAAAATTATATTCATTTTCATTTCCATTTTCATAAAAATTAGTATTTATAAAATTTGTATCATAAAATTTGATCC
ATGTTGTAAAATAAATAAGGCGGCCGGAATTCGATATCAAGCTTATCGATACCGTTCGACCTCGAGGGGG
GGCCCGGTACCCAATTCGCCCTATAGTGAGTCGTATTACAATTCACTGGCCGTCGTTTTTACAACGTCGTG
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CTCGTCAAGGGGGCGGAGCCTATGGAAAAACGCCAG**C**AACGCGGCCTTTTTACGGTTCTTGGCCTTTTGC
TGGCCTTTTTGCTCACATGTTCTTTCTGCGTTATCCCTGATTTCTGTGGATAACCGTATTACCGCCTTTG
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1,148-3,780	326-2,958	pBluescript SK backbone
1,410-1,716	588-894	f1(+) origin
3,607	2,785	ori: Origin of replication
1,979-2,839	1,157-2,017	Amp ^r : Ampicillin resistance gene

Restriction enzyme sites of pCL31

Enzyme Name	Sequence	Count	Cutting Positions
AccI	GT!MKAC	1	1177
ApaI	GGGCC!C	1	1195
Asp718I	G!GTACC	1	1197
BamHI	G!GATCC	2	309, 971
BclI	T!GATCA	0	-
BglII	A!GATCT	0	-
EcoRI	G!AATTC	2	327, 1149
EcoRV	GAT!ATC	1	1157
HincII	GTY!RAC	1	1178
HindIII	A!AGCTT	2	559, 1161
KpnI	GGTAC!C	1	1201
MluI	A!CGCGT	0	-
NcoI	C!CATGG	0	-
NdeI	CA!TATG	0	-
NheI	G!CTAGC	0	-
NotI	GC!GGCCGC	3	290, 334, 1142
PstI	CTGCA!G	1	325
SacI	GAGCT!C	1	277
SalI	G!TCGAC	1	1176
ScaI	AGT!ACT	1	2286
SmaI	CCC!GGG	1	317
StuI	AGG!CCT	0	-
XbaI	T!CTAGA	1	297
XhoI	C!TCGAG	1	1182

Supplier	Contact us
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