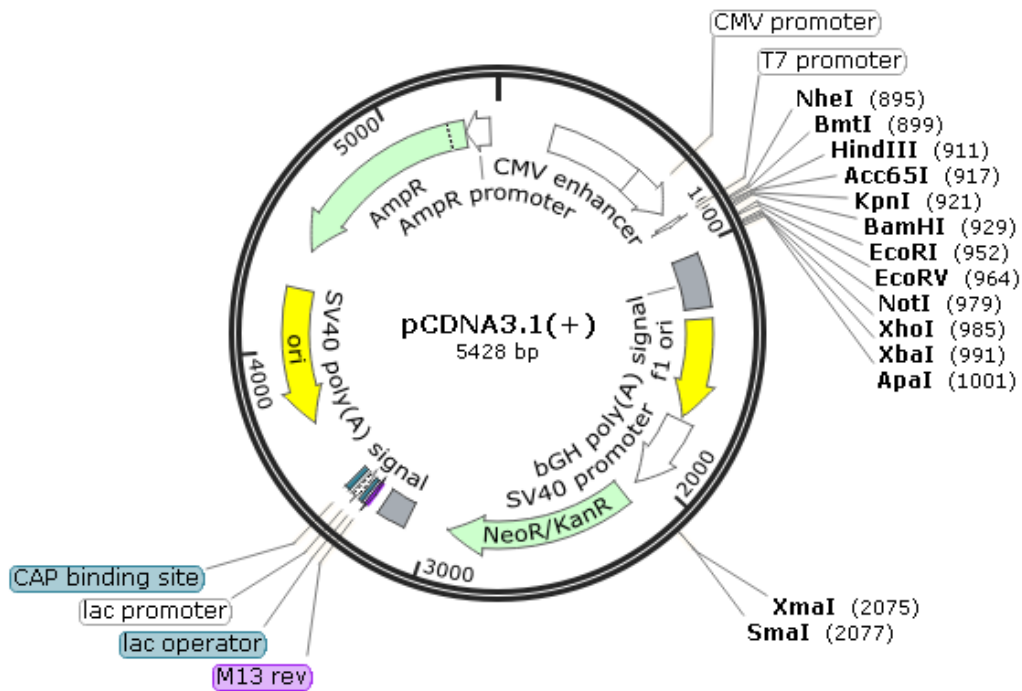


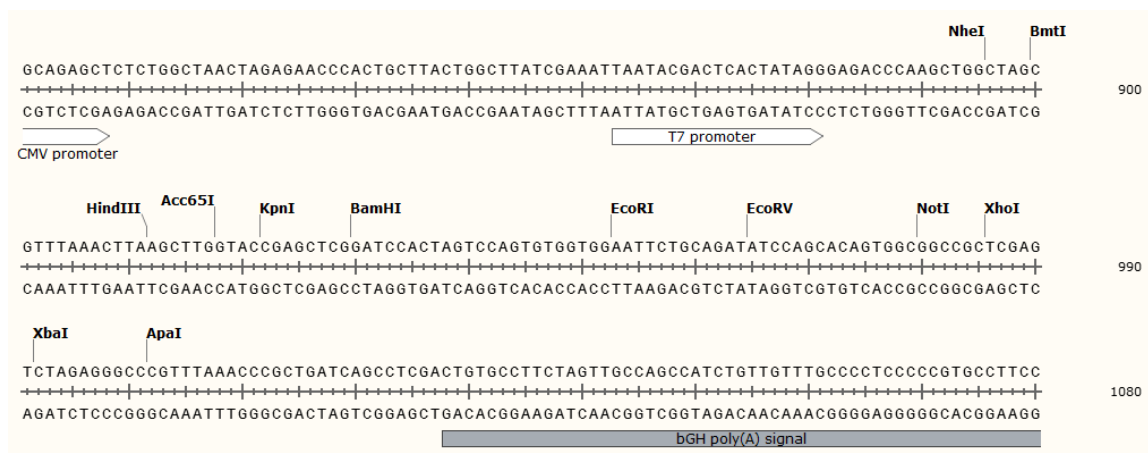
pCDNA3.1(+) Vector Information

Created with SnapGene®



载体名称:	pCDNA3.1(+)
质粒类型:	表达载体
高拷贝/低拷贝:	高拷贝
启动子:	CMV promoter, T7 promoter, SV40 promoter, lac promoter
克隆方法:	多克隆位点, 限制性内切酶
克隆位点:	MCS
载体大小:	5428bp
5' 测序引物及序列:	CMV-F: CGCAAATGGGCGGTAGGCGTG
3' 测序引物及序列:	pcDNA3.1-R (BGH-R): TAGAAGGCACAGTCGAGG
载体标签:	--
载体抗性:	Amp
筛选标记:	Neomycin /G418
产品目录号:	
稳定性:	瞬时表达 Transient
组成型/诱导型:	组成型
病毒/非病毒:	非病毒
克隆菌株:	DH5α / Match-T1

MCS ☒:



LOCUS Exported 5428bp ds-DNA circular SYN 14-SEP-2017
 DEFINITION pCDNA3.1(+).
 ACCESSION .
 VERSION .
 KEYWORDS pCDNA3.1(+)
 SOURCE synthetic DNA construct
 ORGANISM synthetic DNA construct
 REFERENCE 1 (bases 1 to 5428)
 AUTHORS .
 TITLE Direct Submission
 JOURNAL Exported Wednesday, June 12, 2019 from SnapGene 3.2.1
<http://www.snapgene.com>

FEATURES Location/Qualifiers

source	1..5428	/organism="synthetic DNA construct" /mol_type="other DNA"
enhancer	235..614	/note="CMV enhancer" /note="human cytomegalovirus immediate early enhancer"
promoter	615..818	/note="CMV promoter" /note="human cytomegalovirus (CMV) immediate early promoter"
promoter	863..881	/note="T7 promoter" /note="promoter for bacteriophage T7 RNA polymerase"
polyA_signal	1028..1252	/note="bGH poly(A) signal" /note="bovine growth hormone polyadenylation signal"
rep_origin	1298..1726	

```

        /direction=RIGHT
        /note="f1 ori"
        /note="f1 bacteriophage origin of replication; arrow
        indicates direction of (+) strand synthesis"
promoter    1740..2069
            /note="SV40 promoter"
            /note="SV40 enhancer and early promoter"
rep_origin  1920..2055
            /note="SV40 ori"
            /note="SV40 origin of replication"
CDS         2136..2930
            /codon_start=1
            /gene="aph(3')-II (or nptII)"
            /product="aminoglycoside phosphotransferase from Tn5"
            /note="NeoR/KanR"
            /note="confers resistance to neomycin, kanamycin, and G418
            (Geneticin(R))"

/translation="MIEQDGLHAGSPAAWVERLFGYDWAQQTIGCSDAAVFRLSAQGRP
            VLFVKTDLSGALNELQDEAARLSWLATTGVPAAVLDVVTEAGRDWLLLGEVPGQDLLS
            SHLAPAEKVSIMADAMRRLHTLDPATCPFDHQAKHRIERARTRMEAGLVDQDDLDEEHQ
            GLAPAELEFARLKARMPDGEDLVVTHGDACLPNIMVENGRFSGFIDCGRLGVADRYQDIA
            LATRDIAEELGGEWADRFLVLYGIAAPDSQRIAFYRLLDEFF"
polyA_signal 3104..3225
            /note="SV40 poly(A) signal"
            /note="SV40 polyadenylation signal"
primer_bind  complement(3274..3290)
            /note="M13 rev"
            /note="common sequencing primer, one of multiple similar
            variants"
protein_bind 3298..3314
            /bound_moiety="lac repressor encoded by lacI"
            /note="lac operator"
            /note="The lac repressor binds to the lac operator to
            inhibit transcription in E. coli. This inhibition can be
            relieved by adding lactose or
            isopropyl-beta-D-thiogalactopyranoside (IPTG)."
```

promoter complement(3322..3352)

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            /note="lac promoter"
            /note="promoter for the E. coli lac operon"
protein_bind 3367..3388
            /bound_moiety="E. coli catabolite activator protein"
            /note="CAP binding site"
            /note="CAP binding activates transcription in the presence
```

of cAMP. "
 rep_origin complement(3676..4261)
 /direction=LEFT
 /note="ori"
 /note="high-copy-number ColE1/pMB1/pBR322/pUC origin of replication"
 CDS complement(4432..5292)
 /codon_start=1
 /gene="bla"
 /product="beta-lactamase"
 /note="AmpR"
 /note="confers resistance to ampicillin, carbenicillin, and related antibiotics"

/translation="MSIQHFRVALIPFFAAFCPLPVFAHPETLVKVKDAEDQLGARVGYI
 ELDLNSGKILESFRPEERFPMSTFKVLLCGAVLSRIDAGQEQLGRRIHYSQNDLVEYS
 PVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTIGGPKELTAFLEHMGDGHVTRLDRW
 EPELNEAIPNDERDTMPVAMATTLRKLTTGELLTLASRQQLIDWMEADKVAGPLLRSA
 LPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTGSQATMDERNRQIAEIGAS
 LIKHW"

promoter complement(5293..5397)
 /gene="bla"
 /note="AmpR promoter"

ORIGIN

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 61 CCGCATAGTT AAGCCAGTAT CTGCTCCCTG CTTGTGTGTT GGAGGTCGCT GAGTAGTGGC
 121 CGAGCAAAAT TTAAGCTACA ACAAGCAAG GCTTGACCGA CAATTGCATG AAGAATCTGC
 181 TTAGGGTTAG GCGTTTTGCG CTGCTTCGCG ATGTACGGGC CAGATATACG CGTTGACATT
 241 GATTATTGAC TAGTTATTAA TAGTAATCAA TTACGGGGTC ATTAGTTCAT AGCCCATATA
 301 TGGAGTTCCG CGTTACATAA CTTACGGTAA ATGGCCCCGCC TGGCTGACCG CCCAACGACC
 361 CCCGCCATT GACGTCAATA ATGACGTATG TTCCCATAGT AACGCCAATA GGGACTTTCC
 421 ATTGACGTCA ATGGGTGGAG TATTTACGGT AAAGTCCCA CTTGGCAGTA CATCAAGTGT
 481 ATCATATGCC AAGTACGCCC CCTATTGACG TCAATGACGG TAAATGGCCC GCCTGGCATT
 541 ATGCCAGTA CATGACCTTA TGGGACTTTC CTAATTGGCA GTACATCTAC GTATTAGTCA
 601 TCGCTATTAC CATGGTGATG CGGTTTTGGC AGTACATCAA TGGGCGTGGA TAGCGGTTTG
 661 ACTCACGGGG ATTTCCAAGT CTCCACCCCA TTGACGTCAA TGGGAGTTG TTTTGGCACC
 721 AAAATCAACG GGAAGTTCCA AAATGTCGTA ACAACTCCGC CCCATTGACG CAAATGGGCG
 781 GTAGGCGTGT ACGGTGGGAG GTCTATATAA GCAGAGCTCT CTGGCTAACT AGAGAACCCA
 841 CTGCTTACTG GCTTATCGAA ATTAATACGA CTCACTATAG GGAGACCCAA GCTGGCTAGC
 901 GTTTAAACTT AAGCTTGGTA CCGAGCTCGG ATCCACTAGT CCAGTGTGGT GGAATTCTGC
 961 AGATATCCAG CACAGTGGCG GCCGCTCGAG TCTAGAGGGC CCGTTTAAAC CCGCTGATCA
 1021 GCCTCGACTG TGCCTTCTAG TTGCCAGCCA TCTGTTGTTT GCCCTCCCC CGTGCCTTCC
 1081 TTGACCCTGG AAGGTGCCAC TCCCACTGTC CTTTCTAAT AAAATGAGGA AATTGCATCG
 1141 CATTGTCTGA GTAGGTGTCA TTCTATTCTG GGGGGTGGGG TGGGGCAGGA CAGCAAGGGG

1201 GAGGATTGGG AAGACAATAG CAGGCATGCT GGGGATGCGG TGGGCTCTAT GGCTTCTGAG
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1441 GCTCTAAATC GGGGGCTCCC TTTAGGGTTC CGATTTAGTG CTTTACGGCA CCTCGACCCC
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1561 CGCCCTTGA CGTTGGAGTC CACGTTCTTT AATAGTGGAC TCTTGTCCA AACTGGAACA
1621 AACTCAACC CTATCTCGGT CTATTCTTTT GATTTATAAG GGATTTTGCC GATTCGGCC
1681 TATTGGTTAA AAAATGAGCT GATTTAACA AAAATTAACG CGAATTAATT CTGTGGAATG
1741 TGTGTCAGTT AGGGTGTGGA AAGTCCCAG GCTCCCAGC AGGCAGAAGT ATGCAAAGCA
1801 TGCATCTCAA TTAGTCAGCA ACCAGGTGTG GAAAGTCCCC AGGCTCCCCA GCAGGCAGAA
1861 GTATGCAAAG CATGCATCTC AATTAGTCAG CAACCATAGT CCCGCCCTA ACTCCGCCA
1921 TCCCGCCCCT AACTCCGCC AGTTCGCC ATTCTCCGCC CCATGGCTGA CTAATTTTTT
1981 TTATTTATGC AGAGGCCGAG GCCGCTCTG CCTCTGAGCT ATTCCAGAAG TAGTGAGGAG
2041 GCTTTTTTGG AGGCCTAGGC TTTTGCAAAA AGCTCCCGGG AGCTTGATA TCCATTTTCG
2101 GATCTGATCA AGAGACAGGA TGAGGATCGT TTCGCATGAT TGAACAAGAT GGATTGCACG
2161 CAGGTTCTCC GGCCGCTTGG GTGGAGAGGC TATTCGGCTA TGAACAAGAT GGATTGCACG
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2401 GGGACTGGCT GCTATTGGGC GAAGTGCCGG GGCAGGATCT CCTGTATCT CACCTTGCTC
2461 CTGCCAGAA AGTATCCATC ATGGCTGATG CAATGCGGCG GCTGCATACG CTTGATCCGG
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2641 AACTGTTCCG CAGGCTCAAG GCGCGCATGC CCGACGGCGA GGATCTCGTC GTGACCCATG
2701 GCGATGCCTG CTTGCCGAAT ATCATGGTGG AAAATGGCCG CTTTTCTGGA TTCATCGACT
2761 GTGGCCGGCT GGGTGTGGCG GACCCTATC AGGACATAGC GTTGGCTACC CGTGATATTG
2821 CTGAAGAGCT TGGCGGCGAA TGGGCTGACC GCTTCTCGT GCTTTACGGT ATCGCCGCTC
2881 CCGATTGCGA GCGCATCGCC TTCTATCGCC TTCTTGACGA GTTCTTCTGA GCGGGACTCT
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3001 CGCCGCTTC TATGAAAGGT TGGGCTTCGG AATCGTTTTT CGGGACGCCG GCTGGATGAT
3061 CCTCCAGCGC GGGGATCTCA TGCTGGAGTT CTTCGCCAC CCCAACTTGT TTATTGCAGC
3121 TTATAATGGT TACAAATAAA GCAATAGCAT CACAAATTC ACAATAAAG CATTTTTTTC
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3301 TTATCCGCTC ACAATCCAC ACAACATACG AGCCGGAAGC ATAAAGTGTA AAGCCTGGGG
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3841 TCTCCCTTCG GGAAGCGTGG CGCTTTCTCA TAGCTCACGC TGTAGGTATC TCAGTTCGGT
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4201 CGCTGGTAGC GGTTTTTTTG TTTGCAAGCA GCAGATTACG CGCAGAAAAA AAGGATCTCA
4261 AGAAGATCCT TTGATCTTTT CTACGGGGTC TGACGCTCAG TGGAACGAAA ACTCACGTTA
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4381 ATGAAGTTTT AAATCAATCT AAAGTATATA TGAGTAAACT TGGTCTGACA GTTACCAATG
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4561 AATGATACCG CGAGACCCAC GCTCACCGGC TCCAGATTTA TCAGCAATAA ACCAGCCAGC
4621 CGGAAGGGCC GAGCGCAGAA GTGGTCCTGC AACTTTATCC GCCTCCATCC AGTCTATTAA
4681 TTGTTGCCGG GAAGCTAGAG TAAGTAGTTC GCCAGTTAAT AGTTTGCGCA ACGTTGTTGC
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