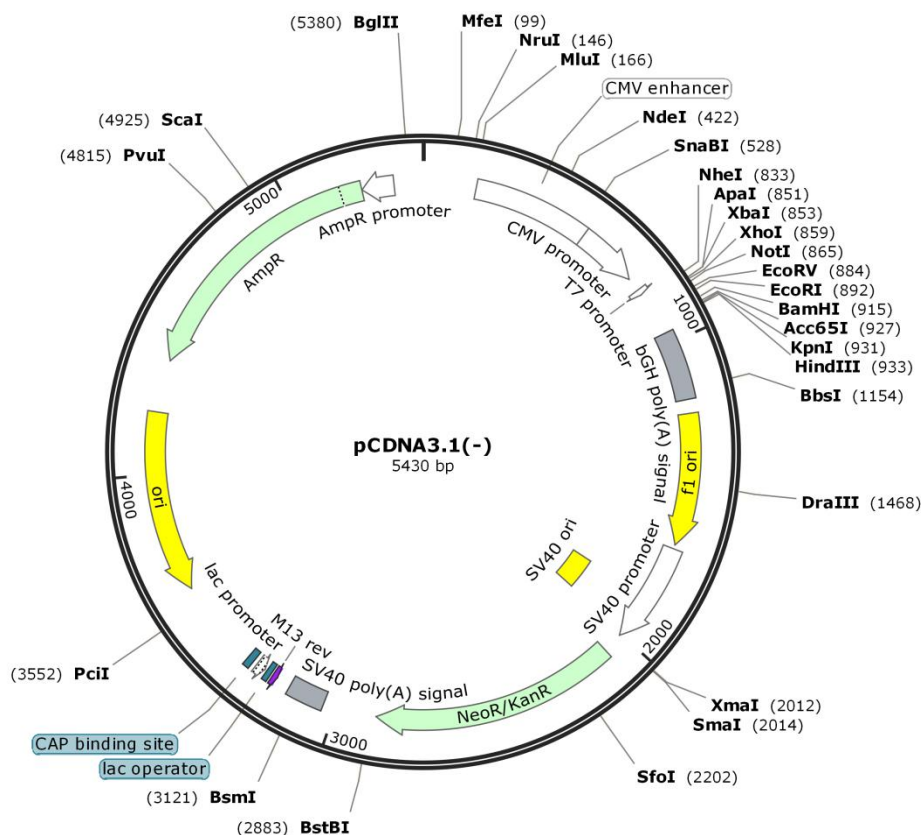


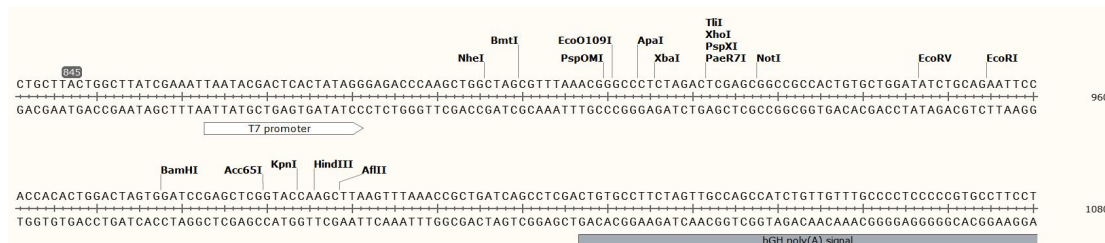
# pCDNA3.1(-) Vector Information

Created with SnapGene®



载体名称:	pcDNA3. 1(-)
质粒类型:	哺乳动物细胞表达载体
启动子:	CMV
表达水平:	高拷贝
克隆方法:	多克隆位点, 限制性内切酶
载体大小:	5430 bp
5' 测序引物:	CMV-F: CGCAAATGGGCGGTAGGCGTG
3' 测序引物:	pcDNA3. 1-R (BGH-R): TAGAAGGCACAGTCGAGG
载体标签:	--
载体抗性:	Amp
筛选标记:	新霉素/G418
备注:	与其他 pcDNA3. 1 系列载体差异主要是载体抗性;pcDNA3. 1(+)/pcDNA3. 1(-)载体的差异在于 F1 复制点的向不同。
产品目录号:	--
稳定性:	瞬表达 Transient
组成型:	组成型 Constitutive
病毒/非病毒:	非病毒

MCS ☒ :



LOCUS Exported 5430bp ds-DNA circular SYN 16-MAR-2020

DEFINITION synthetic circular DNA

ACCESSION .

VERSION .

KEYWORDS pCDNA3.1(-)

SOURCE synthetic DNA construct

ORGANISM synthetic DNA construct

REFERENCE 1 (bases 1 to 5430)

AUTHORS .

TITLE Direct Submission

JOURNAL Exported Tuesday, March 17, 2020 from SnapGene 3.2.1

<http://www.snapgene.com>

FEATURES Location/Qualifiers

source	1..5430 /organism="synthetic DNA construct" /mol_type="other DNA"
enhancer	173..552 /note="CMV enhancer" /note="human cytomegalovirus immediate early enhancer"
promoter	553..756 /note="CMV promoter" /note="human cytomegalovirus (CMV) immediate early promoter"
promoter	801..819 /note="T7 promoter" /note="promoter for bacteriophage T7 RNA polymerase"
polyA_signal	965..1189 /note="bGH poly(A) signal" /note="bovine growth hormone polyadenylation signal"
rep_origin	1235..1663 /direction=RIGHT /note="f1 ori"

/note="f1 bacteriophage origin of replication; arrow indicates direction of (+) strand synthesis"  
 promoter 1677..2006  
 /note="SV40 promoter"  
 /note="SV40 enhancer and early promoter"  
 rep\_origin 1857..1992  
 /note="SV40 ori"  
 /note="SV40 origin of replication"  
 CDS 2073..2867  
 /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  
 VLFVKTDLSGALNELQDEAARLSWLATTGVPCAAVLDVVTEAGRDWLLGEVPGQDLLS  
 SHLAPAEKVSIMADAMRRLHTLDPATCPFHDHQAKHRIERARTRMEAGLVDQDDLDEEHQ  
 GLAPAEELFARLKARMPDGEDLVVTHGDACLPNIMVENGRFSGFIDCGRLGVADRYQDIA  
 LATRDIAEELGGEWADRFLVLYGIAAPDSQRIAFYRLLDEFF"  
 polyA\_signal 3041..3162  
 /note="SV40 poly(A) signal"  
 /note="SV40 polyadenylation signal"  
 primer\_bind complement(3211..3227)  
 /note="M13 rev"  
 /note="common sequencing primer, one of multiple similar variants"  
 protein\_bind 3235..3251  
 /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(3259..3289)  
 /note="lac promoter"  
 /note="promoter for the E. coli lac operon"  
 protein\_bind 3304..3325  
 /bound\_moiety="E. coli catabolite activator protein"  
 /note="CAP binding site"

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        /note="CAP binding activates transcription in the presence
        of cAMP."
rep_origin    complement(3613..4201)
              /direction=LEFT
              /note="ori"
              /note="high-copy-number ColE1/pMB1/pBR322/pUC origin of
              replication"
CDS           complement(4372..5232)
              /codon_start=1
              /gene="bla"
              /product="beta-lactamase"
              /note="AmpR"
              /note="confers resistance to ampicillin, carbenicillin, and
              related antibiotics"

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/translation="MSIQHFRVALIPFFAAFCPLPVFAHPETLVKVKDAEDQLGARVGYI

ELDLNSGKILESFRPEERFPMSTFKVLLCGAVLSRIDAGQEQLGRRIHYSQNDLVEYS

PVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTIGGPKELTAFLHNMGDHVTRLDRW

EPELNEAIPNDERDITMPVAMATTLRKLITGELLTLASRQQLIDWMEADKVAGPLLRSA

LPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTGSQATMDERNRQIAEIGAS

LIKHW"

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promoter     complement(5233..5337)
              /gene="bla"
              /note="AmpR promoter"

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ORIGIN

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   121 AGGGTTAGGC GTTTTGCGCT GCTTCGCGAT GTACGGGCCA GATATACGCG TTGACATTGA
   181 TTATTGACTA GTTATTAATA GTAATCAATT ACGGGGTCAT TAGTTCATAG CCCATATATG
   241 GAGTCCGCG TTACATAACT TACGGTAAAT GGCCCGCCTG GCTGACCGCC CAACGACCCC
   301 CGCCCATGTA CGTCAATAAT GACGTATGTT CCCATAGTAA CGCCAATAGG GACTTTCCAT
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   421 CATATGCCAA GTACGCCCC TATTGACGTC AATGACGGTA AATGGCCCCG CTGGCATTAT
   481 GCCCAGTACA TGACCTTATG GGACTTTCCT ACTTGGCAGT ACATCTACGT ATTAGTCATC
   541 GCTATTACCA TGGTGATGCG GTTTTGGCAG TACATCAATG GCGGTGGATA GCGGTTTGAC
   601 TCACGGGGAT TTCCAAGTCT CCACCCCATG GACGTCAATG GGAGTTTGTT TTGGCACCAA
   661 AATCAACGGG ACTTTCCAAA ATGTCGTAAC AACTCCGCC CATTGACGCA AATGGGCGGT
   721 AGGCGTGTAC GGTGGGAGGT CTATATAAGC AGAGCTCTCT GGCTAACTAG AGAACCCACT
   781 GCTTACTGGC TTATCGAAAT TAATACGACT CACTATAGGG AGACCCAAGC TGGCTAGCGT
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1021 ACCCTGGAAG GTGCCACTCC CACTGTCCTT TCCTAATAAA ATGAGGAAAT TGCATCGCAT  
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1741 ATCTCAATTA GTCAGCAACC AGGTGTGGAA AGTCCCAGG CTCCCAGCA GGCAGAAGTA  
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1981 TTTTGGAGG CCTAGGCTTT TGCAAAAAGC TCCCGGAGC TTGTATATCC ATTTTCGGAT  
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