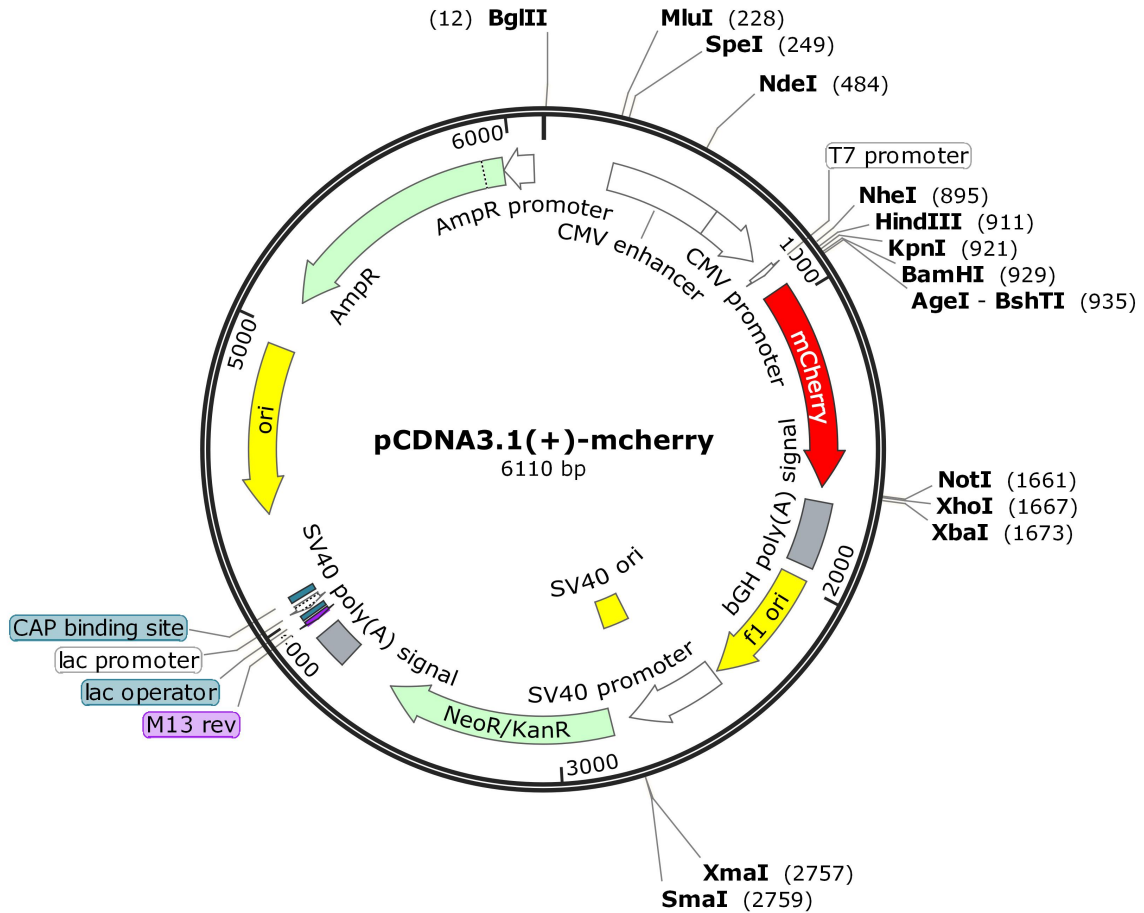




pCDNA3.1(+)-mcherry Vector Information

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载体名称:	pCDNA3.1(+)-mcherry
质粒类型:	哺乳动物细胞表达载体
表达水平:	高拷贝
启动子:	CMV 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:	6110bp
5' 测序引物及序列:	CMV-F:CGCAAATGGGCGGTAGGCGTG
3' 测序引物及序列:	--
载体标签:	mCherry
载体抗性:	Amp
筛选标记:	Neo
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:	DH5 α / Match-T1

MCS 区:



LOCUS Exported 6110bp ds-DNA circular SYN 15-MAR-2019
 DEFINITION synthetic circular DNA
 ACCESSION .
 VERSION .
 KEYWORDS pCDNA3.1(+)-mcherry
 SOURCE synthetic DNA construct
 ORGANISM synthetic DNA construct
 REFERENCE 1 (bases 1 to 6110)
 AUTHORS 1
 TITLE Direct Submission
 JOURNAL Exported Monday, June 24, 2019 from SnapGene 3.2.1
<http://www.snapgene.com>

FEATURES Location/Qualifiers
 source 1..6110
 /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"
 CDS 948..1658
 /codon_start=1



```
/product="monomeric derivative of DsRed fluorescent protein
(Shaner et al., 2004)"
/note="mCherry"
/note="mammalian codon-optimized"
/translation="MVSKGEEDNMAIIKEFMRFKVMHEGVSNGHEFEIEGEGEGRPYEG
TQTAKLKVTKGGPLPFAWDILSPQFMYGSKAYVKHPADIPDYLKLSFPEGFKWERVMNF
EDGGVVTVTQDSSLQDGEFIYKVKLRGTNFPDGPVMQKKTMGWEASSERMYPEDGALK
GEIKQRLKLDGGHYDAEVKTTYKAKKPVQLPGAYNVNIKLDITSHNEDYTIVEQYERA
EGRHSTGGMDELYK"
polyA_signal 1710..1934
/note="bGH poly(A) signal"
/note="bovine growth hormone polyadenylation signal"
rep_origin 1980..2408
/direction=RIGHT
/note="f1 ori"
/note="f1 bacteriophage origin of replication; arrow
indicates direction of (+) strand synthesis"
promoter 2422..2751
/note="SV40 promoter"
/note="SV40 enhancer and early promoter"
rep_origin 2602..2737
/note="SV40 ori"
/note="SV40 origin of replication"
CDS 2818..3612
/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
VLFVKTDLSGALNELQDEAARLSWLATTGVPCAAVLDDVTEAGRDWLLLEVPDQDLS
SHLAPAEKVSIMADAMRRLHTLDPATCPFDHQAKHRIERARTRMEAGLVDQDDLDEEHQ
GLAPAEELFARLKARMPDGEDLVVTHGDACLPNIMVENGRFSGFIDCGRLGVADRYQDIA
LATRDIAEELGGEWADRFLVLYGIAAPDSQRIAFYRLLDEFF"
polyA_signal 3786..3907
/note="SV40 poly(A) signal"
/note="SV40 polyadenylation signal"
primer_bind complement(3956..3972)
/note="M13 rev"
/note="common sequencing primer, one of multiple similar
variants"
protein_bind 3980..3996
/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(4004..4034)

```

        /note="lac promoter"
        /note="promoter for the E. coli lac operon"
```

protein_bind 4049..4070

```

        /bound_moiety="E. coli catabolite activator protein"
        /note="CAP binding site"
        /note="CAP binding activates transcription in the presence
        of cAMP."
```

rep_origin complement(4358..4943)

```

        /direction=LEFT
        /note="ori"
        /note="high-copy-number ColE1/pMB1/pBR322/pUC origin of
        replication"
```

CDS complement(5114..5974)

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        /codon_start=1
        /gene="bla"
        /product="beta-lactamase"
        /note="AmpR"
        /note="confers resistance to ampicillin, carbenicillin, and
        related antibiotics"
        /translation="MSIQHFRVALIPFFAAFCLPVFAHPETLVKVKDAEDQLGARVGYI
        ELDLNSGKILESFRPEERFPMSTFKVLLCGAVLSRIDAGQEQLGRRIHYSQNDLVEYS
        PVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTIGGPKELTAFLHNMGDHVTRLDRW
        EPELNEAIPNDERDTMPVAMATTLRKLTLGELLTLASRQQLIDWMEADKVGAPLLRSA
        LPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTGSQATMDERNRQIAEIGAS
        LIKHW"
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promoter complement(5975..6079)

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        /gene="bla"
        /note="AmpR promoter"
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ORIGIN

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1 GACGGATCGG GAGATCTCCC GATCCCCTAT GGTGCACTCT CAGTACAATC TGCTCTGATG
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121 CGAGCAAAAT TTAAGCTACA ACAAGGCAAG GCTTGACCGA CAATTGCATG AAGAATCTGC
181 TTAGGGTTAG GCGTTTTGCG CTGCTTCGCG ATGTACGGGC CAGATATACG CGTTGACATT
241 GATTATTGAC TAGTTATTAA TAGTAATCAA TTACGGGGTC ATTAGTTCAT AGCCCATATA
301 TGGAGTTCCG CGTTACATAA CTTACGGTAA ATGCCCCGCC TGGCTGACCG CCCAACGACC
361 CCCGCCATT GACGTCAATA ATGACGTATG TTCCCATAGT AACGCCAATA GGGACTTTC
421 ATTGACGTCA ATGGGTGGAG TATTACGGT AAAGTCCCA CTTGGCAGTA CATCAAGTGT
481 ATCATATGCC AAGTACGCC CCTATTGACG TCAATGACGG TAAATGGCCC GCCTGGCATT
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541 ATGCCAGTA CATGACCTTA TGGGACTTTC CTA CTGTTGCA GTACATCTAC GTATTAGTCA
601 TCGCTATTAC CATGGTGATG CGGTTTTGGC AGTACATCAA TGGGCGTGGTA TAGCGGTTTG
661 ACTCACGGGG ATTTCCAAGT CTCCACCCCA TTGACGTCAA TGGGAGTTTG TTTTGGCACC
721 AAAATCAACG GGA CTTTCCA AAATGTCGTA ACAACTCCGC CCCATTGACG CAAATGGGCG
781 GTAGGCGTGT ACGGTGGGAG GTCTATATAA GCAGAGCTCT CTGGCTAACT AGAGAACCCA
841 CTGCTTACTG GCTTATCGAA ATTAATACGA CTCACTATAG GGAGACCCAA GCTGGCTAGC
901 GTTTAAACTT AAGCTTGGTA CCGAGCTCGG ATCCACCGGT CGCCACCATG GTGAGCAAGG
961 GCGAGGAGGA TAACATGGCC ATCATCAAGG AGTTCATGCG CTTCAAGGTG CACATGGAGG
1021 GCTCCGTGAA CGGCCACGAG TTCGAGATCG AGGGCGAGGG CGAGGGCCCG CCCTACGAGG
1081 GCACCCAGAC CGCCAAGCTG AAGGTGACCA AGGGTGGCCC CCTGCCCTTC GCCTGGGACA
1141 TCCTGTCCCC TCAGTTCATG TACGGCTCCA AGGCCTACGT GAAGCACCCC GCCGACATCC
1201 CCGACTACTT GAAGCTGTCC TTCCCGAGG GCTTCAAGTG GGAGCGCGTG ATGAACTTCG
1261 AGGACGGCGG CGTGGTGACC GTGACCCAGG ACTCCTCCCT GCAGGACGGC GAGTTCATCT
1321 ACAAGGTGAA GCTGCGCGGC ACCAACTTCC CCTCCGACGG CCCCGTAATG CAGAAGAAGA
1381 CCATGGGCTG GGAGGCCTCC TCCGAGCGGA TGTACCCCGA GGACGGCGCC CTGAAGGGCG
1441 AGATCAAGCA GAGGCTGAAG CTGAAGGACG GCGGCCACTA CGACGCTGAG GTCAAGACCA
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1621 GCCACTCCAC CGGCGGCATG GACGAGCTCT ACAAGTAGAG CGGCCGCTCG AGTCTAGAGG
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1741 TTGCCCTCC CCCGTGCCTT CCTTGACCCT GGAAGGTGCC ACTCCCCTG TCCTTTCCTA
1801 ATAAAATGAG GAAATTGCAT CGCATTGTCT GAGTAGGTGT CATTCTATTC TGGGGGTGG
1861 GGTGGGGCAG GACAGCAAGG GGGAGGATTG GGAAGACAAT AGCAGGCATG CTGGGGATGC
1921 GGTGGGCTCT ATGGCTTCTG AGGCGGAAAG AACCAGCTGG GGCTCTAGGG GGTATCCCA
1981 CGCGCCCTGT AGCGGCGCAT TAAGCGCGC GGGTGTGGTG GTTACGCGCA GCGTGACCGC
2041 TACACTTGCC AGCGCCCTAG CGCCCGTCC TTTGCTTTC TTCCCTCCT TTCTCGCCAC
2101 GTTCGCCGGC TTTCCCGTTC AAGCTCTAAA TCGGGGGCTC CCTTTAGGGT TCCGATTTAG
2161 TGCTTTACGG CACCTCGACC CCAAAAACT TGATTAGGGT GATGGTTCAC GTAGTGGGCC
2221 ATCGCCCTGA TAGACGGTTT TTCGCCCTT GACGTTGGAG TCCACGTTCT TTAATAGTGG
2281 ACTCTTGTTT CAAACTGGAA CAACACTCAA CCCTATCTCG GTCTATTCTT TTGATTTATA
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2641 CCCCATGGCT GACTAATTTT TTTTATTTAT GCAGAGGCCG AGGCCGCCTC TGCCTCTGAG
2701 CTATTCCAGA AGTAGTGAGG AGGCTTTTTT GGAGGCCTAG GCTTTTGCAA AAAGCTCCCG
2761 GGAGCTTGTA TATCCATTTT CGGATCTGAT CAAGAGACAG GATGAGGATC GTTTCGCATG
2821 ATTGAACAAG ATGGATTGCA CGCAGTTTCT CCGGCCGCTT GGGTGGAGAG GCTATTCGGC
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3001 GACGAGGCAG CGCGCTATC GTGGCTGGCC ACGACGGCG TTCCTTGGCG AGCTGTGCTC
3061 GACGTTGTCA CTGAAGCGGG AAGGGACTGG CTGCTATTGG GCGAAGTGCC GGGGCAGGAT
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3181 CGGCTGCATA CGCTTGATCC GGCTACCTGC CCATTCGACC ACCAAGCGAA ACATCGCATC
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3301 CATCAGGGGC TCGCGCCAGC CGAACTGTTC GCCAGGCTCA AGGCGCGCAT GCCCGACGGC
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3661 CATCACGAGA TTTCGATTCC ACCGCCGCTT TCTATGAAAG GTTGGGCTTC GGAATCGTTT
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4561 GCTGTAGGTA TCTCAGTTCG GTGTAGGTCG TTCGCTCAA GCTGGGCTGT GTGCACGAAC
4621 CCCCCGTTCA GCCCGACCGC TGCCTTAT CCGGTAATA TCGTCTTGAG TCCAACCCGG
4681 TAAGACACGA CTTATCGCCA CTGGCAGCAG CCACTGGTAA CAGGATTAGC AGAGCGAGGT
4741 ATGTAGGCGG TGCTACAGAG TTCTTGAAGT GGTGGCCTAA CTACGGCTAC ACTAGAAGAA
4801 CAGTATTTGG TATCTGCGCT CTGCTGAAGC CAGTTACCTT CGGAAAAAGA GTTGGTAGCT
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6001 GCATTTATCA GGGTTATTGT CTCATGAGCG GATACATATT TGAATGTATT TAGAAAAATA
6061 AACAAATAGG GGTCCGCGC ACATTCCCC GAAAAGTGCC ACCTGACGTC

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