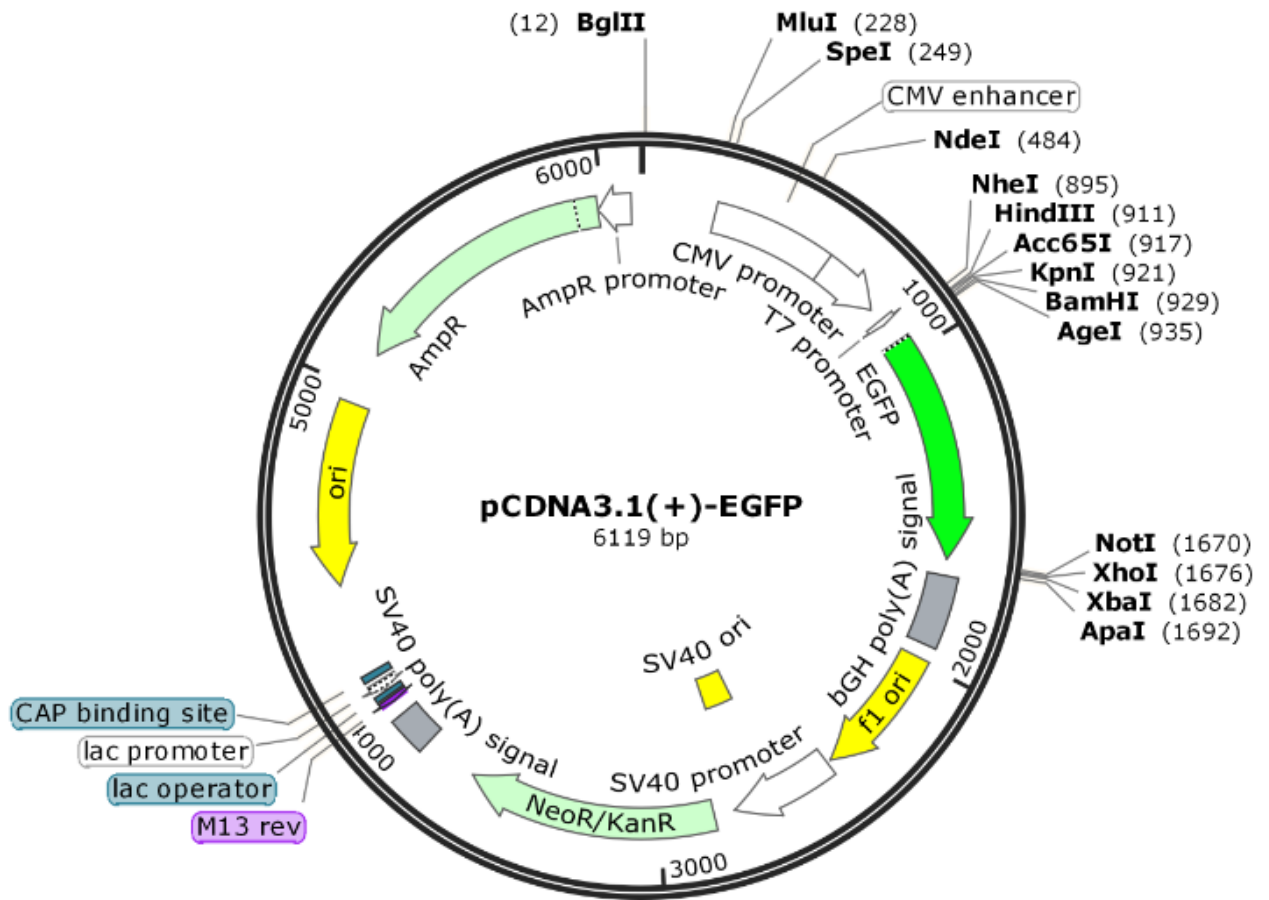


## pCDNA3.1(+)-EGFP Vector Information



载体名称: pCDNA3.1(+)-EGFP  
 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: 6119bp  
 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: DH5 $\alpha$  / Match-T1

MCS ☒:



LOCUS Exported 6119 bp ds-DNA circular SYN 18-SEP-2020  
DEFINITION synthetic circular DNA  
ACCESSION .  
VERSION .  
KEYWORDS pCDNA3.1(+)-EGFP  
SOURCE synthetic DNA construct  
ORGANISM synthetic DNA construct  
REFERENCE 1 (bases 1 to 6119)  
AUTHORS 1  
TITLE Direct Submission  
JOURNAL Exported Friday, September 18, 2020 from SnapGene 3.2.1  
<http://www.snapgene.com>

FEATURES Location/Qualifiers  
source 1..6119  
/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..1667  
/codon\_start=1  
/product="enhanced GFP"  
/note="EGFP"  
/note="mammalian codon-optimized"

/translation="MVSKGEELFTGVVPILVELDGDVNGHKFSVSGEGEDATYGKLT

KFICTTGKLPVPWPTLVTTLTLYGVQCFSRYPDHMKQHDFFKSAMPEGYVQERTIFFKDD

GNYKTRAEVKFEGDTLVNRIELKGIDFKEDGNILGHKLEYNNSHNVIYIMADKQKNGIK

VNFKIRHNIEDGSVQLADHYQQNTPIGDGPVLLPDNHYLSTQSALS KDPNEKRDHMVLL

EFVTAAGITLGMDELYK"

polyA\_signal 1719..1943

/note="bGH poly(A) signal"

/note="bovine growth hormone polyadenylation signal"

rep\_origin 1989..2417

/direction=RIGHT

/note="f1 ori"

/note="f1 bacteriophage origin of replication; arrow indicates direction of (+) strand synthesis"

promoter 2431..2760

/note="SV40 promoter"

/note="SV40 enhancer and early promoter"

rep\_origin 2611..2746

/note="SV40 ori"

/note="SV40 origin of replication"

CDS 2827..3621

/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

VLVFKTDLSGALNELQDEAARLSWLATTGVPCAAVLDVVTEAGRDWLLGEVPGQDLLS

SHLAPA EKVSIMADAMRRLHTLDPATCPFDHQAKHRIERARTRMEAGLVDQDDLDEEHQ

GLAPAE L FARLKARMPDGEDLVVTHGDA CLPNIMVENGRFSGFIDCGRLGVADRYQDIA

LATRDIAEELGG EWADRFLVLYGIAAPDSQRIAFYRLLDEFF"

polyA\_signal 3795..3916

/note="SV40 poly(A) signal"

/note="SV40 polyadenylation signal"

primer\_bind complement(3965..3981)

/note="M13 rev"

```

        /note="common sequencing primer, one of multiple similar
        variants"
protein_bind 3989..4005
        /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(4013..4043)

```

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

protein\_bind 4058..4079

```

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

rep\_origin complement(4367..4952)

```

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

CDS complement(5123..5983)

```

        /codon_start=1
        /gene="bla"
        /product="beta-lactamase"
        /note="AmpR"
        /note="confers resistance to ampicillin, carbenicillin, and
        related antibiotics"
```

/translation="MSIQHFRVALIPFFAAFCLPVFAHPETLVKVKDAEDQLGARVGYI  
ELDLSNGKILESFRPEERFPMSTFKVLLCGAVLSRIDAGQEQLGRRIHYSQNDLVEYS  
PVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTIGGPKELTAFLHNMGDHSVTRLDRW  
EPELNEAIPNDERDTMPVAMATTLRKLTTGELLTLASRQQLIDWMEADKVAGPLLRSA  
LPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTGSQATMDERNRQIAEIGAS  
LIKHW"

promoter complement(5984..6088)

```

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

ORIGIN

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61 ccgcatagtt aagccagtat ctgctccctg cttgtgtgtt ggaggtcgct gagtagtgcg  
121 cgagcaaaat ttaagctaca acaaggcaag gcttgaccga caattgcatg aagaatctgc  
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541 atgccagta catgacctta tgggactttc ctacttggca gtacatctac gtattagtca  
601 tcgctattac catggtgatg cgtttttgcg agtacatcaa tggcggtgga tagcggtttg  
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