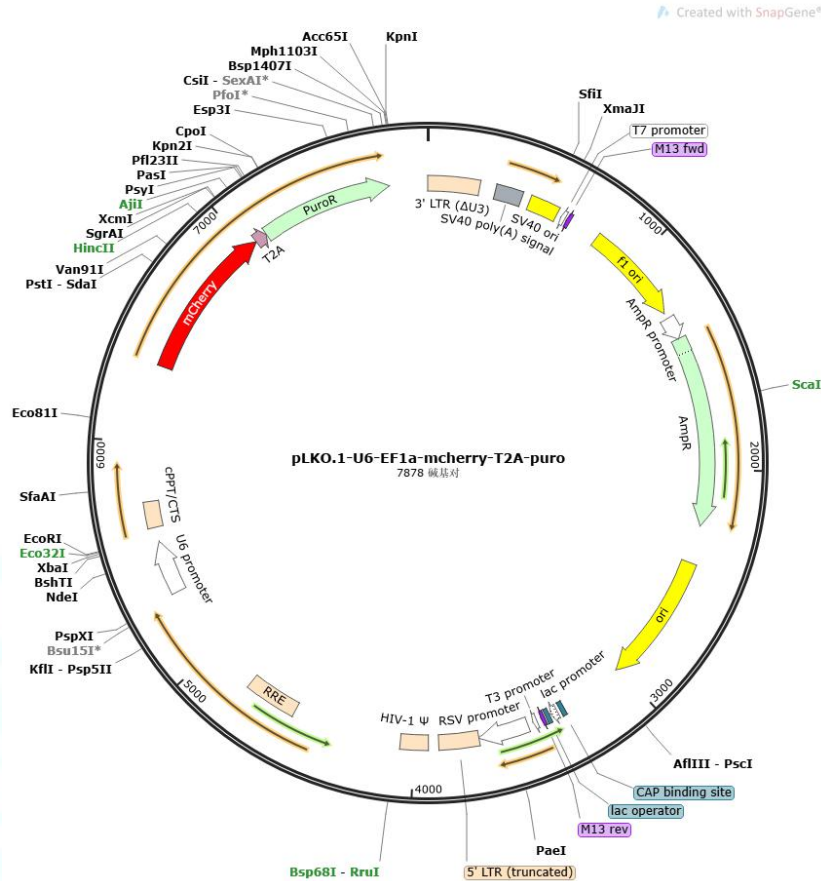




pLK0.1-U6-EF1a-mcherry-T2A-puro Vector Information



载体名称:	pLK0.1-U6-EF1a-mcherry-T2A-puro
质粒类型:	慢病毒载体; RNAi 载体
表达水平:	高拷贝
启动子:	U6 promoter
克隆方法:	多克隆位点, 限制性内切酶
克隆位点:	AgeI, EcoRI
载体大小:	7878bp
5' 测序引物及序列:	U6: ATGGACTATCATATGCTTACCGTA
3' 测序引物及序列:	pLK0-seq-R: GCGGCCAAAGTGGATCTCTG
载体标签:	Mcherry
载体抗性:	Amp
筛选标记:	puro
产品目录号:	
稳定性:	稳定表达 Stable
组成型/诱导型:	组成型
病毒/非病毒:	慢病毒
克隆菌株:	Stb13

MCS 区:



LOCUS pLK0.1-U6-EF1a-mcherry-T2A-puro 7878 bp DNA circular SYN
28-FEB-2022

DEFINITION .
ACCESSION .
VERSION .
KEYWORDS .

SOURCE synthetic DNA construct
ORGANISM synthetic DNA construct
REFERENCE 1 (bases 1 to 7878)
AUTHORS L Preston
TITLE Direct Submission
JOURNAL Exported Jun 2, 2023 from SnapGene 6.0.2
<https://www.snapgene.com>

FEATURES Location/Qualifiers
source 1..7878
/mol_type="other DNA"
/organism="synthetic DNA construct"
LTR 1..234
/label=3' LTR (Delta-U3)
/note="self-inactivating 3' long terminal repeat (LTR) from HIV-1"
/note="color: #ffe4c4"
polyA_signal 306..427
/label=SV40 poly(A) signal
/note="SV40 polyadenylation signal"
/note="color: #a6acb3"
rep_origin 467..602
/label=SV40 ori
/note="SV40 origin of replication"
/note="color: #ffff00"
promoter complement(623..641)
/label=T7 promoter
/note="promoter for bacteriophage T7 RNA polymerase"
/note="color: #ffffff; direction: LEFT"
primer_bind complement(651..667)



```
/label=M13 fwd
/note="common sequencing primer, one of multiple similar
variants"
/note="color: #a020f0; direction: LEFT"
rep_origin 809..1264
/direction=RIGHT
/label=f1 ori
/note="f1 bacteriophage origin of replication; arrow
indicates direction of (+) strand synthesis"
/note="color: #ffff00"
promoter 1290..1394
/gene="bla"
/label=AmpR promoter
/note="color: #ffffff; direction: RIGHT"
CDS 1395..2255
/codon_start=1
/gene="bla"
/product="beta-lactamase"
/label=AmpR
/note="confers resistance to ampicillin, carbenicillin, and
related antibiotics"
/note="This feature has 2 segments:
  1: 1395 .. 1463 / #ccffcc / signal sequence
  2: 1464 .. 2255 / #ccffcc
Cleavage site after base 1463"
/translation="MSIQHFRVALIPFFAAAFCLPVFAHPETLVKVKDAEDQLGARVGYI
ELDLNSGKILESFRPEERFPMSTFKVLLCGAVLSRIDAGQEQLGRRIHYSQNDLVEYS
PVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTIGGPKELTAFLHNMGDHVTRLDRW
EPELNEAIPNDERDTMPVAMATTLRKLTLGELLTLASRQQLIDWMEADKAVGPLLRSA
LPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTGSQATMDERNRQIAEIGAS
LIKHW"
rep_origin 2426..3014
/direction=RIGHT
/label=ori
/note="high-copy-number ColE1/pMB1/pBR322/pUC origin of
replication"
/note="color: #ffff00"
protein_bind 3302..3323
/label=CAP binding site
/bound_moiety="E. coli catabolite activator protein"
/note="CAP binding activates transcription in the presence
of cAMP."
/note="color: #31849b"
promoter 3338..3368
```



/label=lac promoter
/note="promoter for the E. coli lac operon"
/note="This forward directional feature has 3 segments:
1: 3338 .. 3343 / #ffffff / -35
2: 3344 .. 3361 / #ffffff
3: 3362 .. 3368 / #ffffff / -10"

protein_bind 3376..3392
/label=lac operator
/bound_moiety="lac repressor encoded by lacI"
/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)."
/note="color: #31849b"

primer_bind 3400..3416
/label=M13 rev
/note="common sequencing primer, one of multiple similar variants"
/note="color: #a020f0; direction: RIGHT"

promoter 3437..3455
/label=T3 promoter
/note="promoter for bacteriophage T3 RNA polymerase"
/note="color: #ffffff; direction: RIGHT"

promoter 3481..3709
/label=RSV promoter
/note="Rous sarcoma virus enhancer/promoter"
/note="color: #ffffff; direction: RIGHT"

LTR 3710..3890
/label=5' LTR (truncated)
/note="truncated 5' long terminal repeat (LTR) from HIV-1"
/note="color: #ffe4c4"

misc_feature 3937..4062
/label=HIV-1 Psi
/note="packaging signal of human immunodeficiency virus type 1"
/note="color: #ffe4c4"

misc_feature 4555..4788
/label=RRE
/note="The Rev response element (RRE) of HIV-1 allows for Rev-dependent mRNA export from the nucleus to the cytoplasm."
/note="color: #ffe4c4"

promoter 5315..5555
/label=U6 Promoter



```

/misc_feature 5620..5737
    /note="RNA polymerase III promoter for human U6 snRNA"
    /note="color: #ffffff; direction: RIGHT"
    /label=cPPT/CTS
    /note="central polypurine tract and central termination
    sequence of HIV-1"
    /note="color: #ffe4c4"
CDS 6345..7052
    /codon_start=1
    /product="monomeric derivative of DsRed fluorescent protein
    (Shaner et al., 2004)"
    /label=mCherry
    /note="mammalian codon-optimized"
    /note="color: #ff0000"
    /translation="MVSKGEEDNMAIIKEFMRFKVHMEGSVNGHEFEIEGEGEGRPYEG
    TQTAKLKVTKGGPLPFAWDILSPQFMYGSKAYVKHPADIPDYLKLSFPEGFKWERVMNF
    EDGGVVTVTQDSSLQDGEFIYKVKLRGTNFPSDGPMQKKTMGWEASSERMYPEDGALK
    GEIKQRLKLDGGHYDAEVKTTYKAKKPVQLPGAYNVNIKLDITSHNEDYTIVEQYERA
    EGRHSTGGMDELYK"
CDS 7053..7106
    /codon_start=1
    /product="2A peptide from Thosea asigna virus capsid
    protein"
    /label=T2A
    /note="Eukaryotic ribosomes fail to insert a peptide bond
    between the Gly and Pro residues, yielding separate
    polypeptides."
    /note="color: #cc99b2"
    Cleavage site after base 7103"
    /translation="EGRGSLTTCGDVEENPGP"
CDS 7107..7706
    /codon_start=1
    /gene="pac from Streptomyces alboniger"
    /product="puromycin N-acetyltransferase"
    /label=PuroR
    /note="confers resistance to puromycin"
    /note="color: #ceffcc"
    /translation="MTEYKPTVRLATRDDVPRAVRTLAAAFADYPATRHTVDPDRHIER
    VTELQELFLTRVGLDIGKVVVADDGAAVAVWVTPESVEAGAVFAEIGPRMAELSGSRLA
    AQQQMEGLLAPHRPKPAWFLATVGVSPDHQKGLGSAVVLPVVEAAERAGVPAFLETS
    APRNLPFYERLGFTVTADVEVPEGPRTWCMTRKPGA"

```

ORIGIN

```

1  tggagggtct aattcactcc caacgaagac agatctgct ttttgcttgt actgggtctc
61  tctggttaga ccagatctga gcctgggagc tctctggcta actaggaac ccactgctta

```



121 agcctcaata aagcttgcct tgagtgttc aagtagtgtg tgcccgtctg ttgtgtgact
181 ctggtaacta gagatccctc agaccctttt agtcagtgtg gaaaatctct agcagtagta
241 gttcatgtca tcttattatt cagtatttat aacttgcaaa gaaatgaata tcagagagtg
301 agaggaactt gtttattgca gcttataatg gttacaaata aagcaatagc atcacaat
361 tcacaaataa agcatttttt tcactgcatt ctagttgtgg ttgtgccaaa ctcatcaatg
421 tatcttatac tgtctggctc tagctatccc gccctaact ccgcccaccc cgcccctaac
481 tccgcccagt tccgcccatt ctccgcccc tggtgacta atttttttta tttatgcaga
541 ggccgaggcc gcctcgccct ctgagctatt ccagaagtag tgaggagget tttttggagg
601 cctagggacg tacccaatc gccctatagt gactcgtatt acgcgcgctc actggccgtc
661 gttttacaac gtcgtgactg ggaaaacctt ggcgttacc aacttaatcg ctttgacgca
721 catccccctt tcgccagctg gcgtaatagc gaagaggccc gcaccgatcg cccttcccaa
781 cagttgcgca gcctgaatgg cgaatgggac gcgccctgta gcggcgcat aagcgcggcg
841 ggtgtggtgg ttacgcgcag cgtgaccgtt acaacttgcca gcgccctagc gcccgctcct
901 ttcgctttct tcccttctt tctcgccacg ttcgccggct tccccgta agctctaat
961 cgggggctcc ctttagggtt ccgatttagt gctttacggc acctcgacc caaaaaactt
1021 gattaggggtg atggttcacg tagtggcca tcgccctgat agacggtttt tcgcccttg
1081 acgttggagt ccacgttctt taatagtga ctctgttcc aaactggaac aactcaac
1141 cctatctcgg tctattctt tgattataa gggattttgc cgatttcggc ctattggtta
1201 aaaaatgagc tgatttaaca aaaattaac gcgaatttta acaaaatatt aacgettaca
1261 atttaggtgg cacttttcgg ggaaatgtgc gcggaacccc tatttgttta tttttetaa
1321 tacattcaaa tatgtatccg ctcatgagac aataaccctg ataaatgctt caataatatt
1381 gaaaaaggaa gagtatgagt attcaacatt tccgtgtcgc cttattccc tttttgcgg
1441 cttttgcct tctgttttt gctcaccag aaacgtggt gaaagtaaaa gatgctgaag
1501 atcagttggg tgcacgagtg ggttacatcg aactggatct caacagcgg aagatccttg
1561 agagttttcg cccgaagaa cgttttcaa tgatgagcac ttttaaagt ctgctatgtg
1621 gcgcggtatt atcccgtatt gacgccggc aagagcaact cggtcgccgc atacactatt
1681 ctcagaatga cttggttag tactcaccag tcacagaaaa gcatcttac gatggcatga
1741 cagtaagaga attatgcagt gctgccataa ccatgagtga taactctgc gccacttac
1801 ttctgacaac gatcggagga ccgaaggagc taaccgctt tttgcacaac atgggggatc
1861 atgtaactcg ccttgatcgt tgggaaccgg agctgaatga agccatacca aacgacgagc
1921 gtgacaccac gatgcctgta gcaatggcaa caacgttgcg caaactatta actggcgaac
1981 tacttactct agcttcccgg caacaattaa tagactggat ggagcggat aaagttgcag
2041 gaccacttct gcgctcgcc ctccggctg gctggtttat tgctgataaa tctggagccg
2101 gtgagcgtgg gtctcgcgg atcattgcag cactggggcc agatggtaag ccctcccgt
2161 tcgtagttat ctacacgac gggagtcagg caactatgga tgaacgaaat agacagatcg
2221 ctgagatagg tgcctactg attaagcatt ggtaactgct agaccaagt tactcatata
2281 tactttagat tgatttaaaa ctctatttt aatttaaaag gatctagggt aagatcctt
2341 ttgataatct catgacaaa atcccctaac gtgagtttcc gttccactga gcgtcagacc
2401 ccgtagaaaa gatcaaagga tcttcttgag atcctttttt tctgcgcgta atctgtgct
2461 tgcaacaaa aaaaccacc ctaccagcg tggtttgtt gccgatcaa gagctaccaa
2521 ctcttttcc gaaggtact ggcttcagca gagcgcagat accaaatact gttcttctag
2581 tgtagccgta gttaggccac cactcaaga actctgtagc accgcctaca tacctcgtc
2641 tgctaactct gttaccagt gctgctgcca gtggcgataa gtcgtgtctt accgggttg
2701 actcaagacg atagttaccg gataaggcgc agcggtcggg ctgaacgggg ggttcgtgca



2761 cacagcccag cttggagcga acgacctaca ccgaactgag atacctacag cgtgagctat
 2821 gagaaagcgc cacgcttccc gaaggagaaa aggcggacag gtatccgta agcggcaggg
 2881 tcggaacagg agagcgcacg agggagcttc cagggggaaa cgcttggtat ctttatagtc
 2941 ctgtcgggtt tcgccacctc tgacttgagc gtcgattttt gtgatgctcg tcaggggggc
 3001 ggagcctatg gaaaaacgcc agcaacgcgg cttttttacg gttcctggcc ttttgctggc
 3061 cttttgctca catgttcttt cctgcgttat cccctgatte tgtggataac cgtattaccg
 3121 cttttgagtg agctgatacc gctcgcgcga gccgaacgac cgagcgcagc gagtcagtga
 3181 gcgaggaagc ggaagagcgc ccaatacgca aaccgcctct cccgcgcgt tggccgattc
 3241 attaatgcag ctggcacgac aggtttcccg actggaaagc gggcagtgag cgcaacgcaa
 3301 ttaatgtgag ttagctcaact cattaggcac cccagcctt acactttatg cttccggctc
 3361 gtatgttggtg tgaattgtg agcggataac aatttcacac aggaaacagc tatgaccatg
 3421 attacccaa gcgcgcaatt aaccctcact aaaggaaca aaagctggag ctgcaagctt
 3481 aatgtagtct tatgcaatac tcttgtagtc ttgcaacatg gtaacgatga gttagaaca
 3541 tccttaciaa ggagagaaaa agcaccgtgc atgccgattg gtggaagtaa ggtggtacga
 3601 tcgtgcctta ttaggaaggc aacagacggg tctgacatgg attggacgaa ccaactgaatt
 3661 gccgattgc agagatatg tatttaagtg cctagctcga tacataaac ggtctctctg
 3721 gttagaccag atctgagcct gggagctctc tggttaacta gggaaccac tgcttaagcc
 3781 tcaataaagc ttgccttgag tgcttcaagt agtgtgtgcc cgtctgttgt gtgactctgg
 3841 taactagaga tcctcagac ctttttagtc agtgtgaaa atctctagca gtggcgcccg
 3901 aacagggact tgaaagcga agggaaacca gaggagctct ctcgacgag gactcggctt
 3961 gctgaagcgc gcacggcaag aggcgagggg cggcgactgg tgagtacgcc aaaaattttg
 4021 actagcggag gctagaagga gagagatggg tgcgagagcg tcagtattaa gcgggggaga
 4081 attagatcgc gatgggaaaa aattcgttta aggccagggg gaaagaaaa atataaatta
 4141 aaacatatag tatgggcaag caggagccta gaacgattcg cagttaatcc tggcctgta
 4201 gaaacatcag aaggctgtag acaaatactg ggacagctac aaccatccct tcagacagga
 4261 tcagaagaac ttagatcatt atataataca gtagcaacce tctatttgtg gcatcaagg
 4321 atagagataa aagacaccaa ggaagcttta gacaagatag aggaagagca aaacaaaagt
 4381 aagaccaccg cacagcaagc ggccgctgat ctcagacct ggaggaggag atatgaggga
 4441 caattggaga agtgaattat ataaataaa agtagtaaaa attgaacct taggagtagc
 4501 accaccaag gcaaagagaa gagtgggtca gagagaaaa agagcagtg gaaataggagc
 4561 tttgttcctt gggttcttgg gagcagcagg aagcactatg ggcgcagcgt caatgacgct
 4621 gacggtacag gccagacaat tattgtctgg tatagtgcag cagcagaaca atttgctgag
 4681 ggctattgag gcgcaacagc atctgttgca actcacagtc tggggcatca agcagctcca
 4741 ggcaagaatc ctggctgtgg aaagatacct aaaggatcaa cagctcctgg ggatttgggg
 4801 ttgctctgga aaactcattt gcaccactgc tgtgccttgg aatgctagt ggagtaataa
 4861 atctctgga cagatttga atcacagcag ctggatggag tgggacagag aaattaacaa
 4921 ttacacaagc ttaatacact ctttaattga agaatcgcaa aaccagcaag aaaagaatga
 4981 acaagaatta ttggaattag ataaatgggc aagtttggg aattggtta acataacaaa
 5041 ttggctgtgg tatataaaat tattcataat gatagtagga ggcttggtag gtttaagaat
 5101 agtttttgc gtactttcta tagtgaatag agttaggcag ggatattcac cattatcgtt
 5161 tcagaccac ctccaacc cgaggggacc cgacaggccc gaaggaatag aagaagaagg
 5221 tggagagaga gacagagaca gatccattcg attagtgaac ggatctgac ggtatcgatc
 5281 acgagactag cctcagcgg ccgcccctt caccgagggc ctatttcca tgattccttc
 5341 atatttgc atacgataca aggctgttag agagataatt ggaattaatt tgactgtaa



5401 cacaaagata ttagtacaaa atacgtgacg tagaaagtaa taatttcttg ggtagtttgc
5461 agttttaaaa ttatgtttta aaatggacta tcatatgctt accgtaactt gaaagtattt
5521 cgatttcttg gctttatata tcttgtggaa aggacgaaac accggttcta gagatatcga
5581 attctcgacc tcgagacaaa tggcagtatt catccacaat tttaaagaa aaggggggat
5641 tggggggtac agtgcagggg aaagaatagt agacataata gcaacagaca tacaactaa
5701 agaattacaa aaacaaatta caaaaattca aaattttcgg gtttattaca gggacagcag
5761 agatccactt tggccgcggc tcgagaagga tctgcgatcg ctccggtgcc cgtcagttggg
5821 cagagcgcac atgcccaca gtccecgaga agttgggggg aggggtcggc aattgaacgg
5881 gtgcctagag aaggtggcgc ggggtaaact gggaaagtga tgtcgtgtac tggctccgcc
5941 tttttccga ggggtgggga gaaccgtata taagtgcagt agtcgccgtg aacgttcttt
6001 ttcgcaacgg gtttgccgcc agaacacagc tgaagcttcg aggggctcgc atctctcctt
6061 cacgcgcccg ccgcctacc tgaggccgcc atccacgccg gttgagtcgc gttctgcgcg
6121 ctccgcctg tgggtgctcc tgaactcgtt ccgccgtcta ggtaagtta aagctcaggt
6181 cgagaccggg cctttgtccg gcgctccctt ggagcctacc tagactcagc cggctctcca
6241 cgctttgcct gaccctgett gctcaactct acgtctttgt ttcgttttct gttctgcgcc
6301 gttacagatc caagctgtga ccggcgccta cgctagacgc caccatggtg agcaagggcg
6361 aggagataa catgcccac atcaaggagt tcatgcgctt caaggtgcac atggagggct
6421 ccgtgaacgg ccacgagttc gagatcgagg gcgagggcga gggccgccc tacgagggca
6481 cccagaccgc caagctgaag gtgaccaagg gtggccccct gcccttcgcc tgggacatcc
6541 tgtcccctca gttcatgtac ggctccaagg cctacgtgaa gcaccccgcc gacatcccg
6601 actacttgaa gctgtcctc cccgagggtc tcaagtggga gcgctgatg aacttcgagg
6661 acggcggcgt ggtgaccgtg acccaggact cctccctgca ggacggcgag ttcatctaca
6721 aggtgaagct gcgcggcacc aacttccct ccgacggccc cgtaatgcag aagaagacca
6781 tgggctggga ggccctctcc gagcggatgt accccagga cggcgcctg aagggcgaga
6841 tcaagcagag gctgaagctg aaggacggcg gccactacga cgctgaggtc aagaccact
6901 acaaggccaa gaagcccgtg cagctgcccg gcgctacaa cgtcaacatc aagttggaca
6961 tcacctcca caacaggac tacaccatcg tggaaacagta cgaacgcgcc gagggccgcc
7021 actccaccgg cggcatggac gagctctaca aggagggcag aggaagtctt ctaacatgcg
7081 gtgacgtgga ggagaatccc ggccctatga ccgagtacaa gccacaggtg cgcctccca
7141 cccgcgaega cgtccccagg gccgtacga cctcgcgcg cgcgttcgcc gactaccccg
7201 ccacgcgcca caccgtgat ccggaccgcc acatcgagcg ggtcaccgag ctgcaagaac
7261 tcttctcac gcgcgtcggg ctgacatcg gcaaggtgtg ggtcggggac gacggcggc
7321 cgggtggcgg ctggaccacg ccggagagcg tcgaagcggg ggcggtgttc gccgagatcg
7381 gcccgcgcat ggccgagttg agcggttccc ggctggccgc gcagcaacag atggaaggcc
7441 tcctggcgcc gcaccggccc aaggagccc cgtggttccct ggccaccgtc ggcgtctcgc
7501 ccgaccacca gggcaagggt ctgggcagcg ccgtcgtgct ccccgagatg gaggcggccg
7561 agcgcgcccg ggtgcccgcc ttcttgaga cctccgcgcc ccgcaacctc cccttctacg
7621 agcggctcgg cttcaccgtc accgcccagc tcgaggtgcc cgaaggaccg cgcacctggt
7681 gcatgaccgg caagcccgtt gcctgatgta caagtaaatg catcgttacc tttaagacca
7741 atgacttaca aggcagctgt agatcttagc cactttttta aagaaaagg gggactggaa
7801 gggttaattc actccaacg aagacaagat ctgctttttg cttgtactgg gtctctctgg
7861 ttagaccaga tctgagcc

//