

MCS 区:



LOCUS Exported 6971bp ds-DNA circular SYN 29-JUN-2018
 DEFINITION synthetic circular DNA
 ACCESSION .
 VERSION .
 KEYWORDS pCDNA3.1-MCS-EFla-copGFP
 SOURCE synthetic DNA construct
 ORGANISM synthetic DNA construct
 REFERENCE 1 (bases 1 to 6971)
 AUTHORS .
 TITLE Direct Submission
 JOURNAL Exported Monday, June 24, 2019 from SnapGene 3.2.1
<http://www.snapgene.com>

FEATURES Location/Qualifiers
 source 1..6971
 /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 991..1215



/note="bGH poly(A) signal"
/note="bovine growth hormone polyadenylation signal"
misc_feature 1216..1761
/note="EF1a"
CDS 1775..2533
/codon_start=1
/note="copGFP"
/translation="MESDESGLPAMEIECRITGTLNGVEFELVGGGEGTPKQGRMTNKM
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HVSFSYRYEAGRVIGDFKVVGTGFPEDSVIFTDKIIRSNAIVEHLHPMGDNLVGSFAR
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polyA_signal 2571..2795
/note="bGH poly(A) signal"
/note="bovine growth hormone polyadenylation signal"
rep_origin 2841..3269
/direction=RIGHT
/note="f1 ori"
/note="f1 bacteriophage origin of replication; arrow
indicates direction of (+) strand synthesis"
promoter 3283..3612
/note="SV40 promoter"
/note="SV40 enhancer and early promoter"
rep_origin 3463..3598
/note="SV40 ori"
/note="SV40 origin of replication"
CDS 3679..4473
/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
VLFVKTDLSGALNELQDEAARLSWLATTGVPCAAVLDVVTEAGRDWLLGEVPGDLLS
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GLAPAEFLARLKARMPDGEDLVVTHGDACLPNIMVENGRFSGFIDCGRLGVADRYQDIA
LATRDIAEELGGEWADRFLVLYGIAAPDSQRIAFYRLLDEFF"
polyA_signal 4647..4768
/note="SV40 poly(A) signal"
/note="SV40 polyadenylation signal"
primer_bind complement(4817..4833)
/note="M13 rev"
/note="common sequencing primer, one of multiple similar

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variants"
protein_bind 4841..4857
               /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)."
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promoter complement(4865..4895)
/note="lac promoter"
/note="promoter for the E. coli lac operon"

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protein_bind 4910..4931
               /bound_moiety="E. coli catabolite activator protein"
               /note="CAP binding site"
               /note="CAP binding activates transcription in the presence
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rep_origin complement(5219..5804)
               /direction=LEFT
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CDS complement(5975..6835)
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      related antibiotics"
      /translation="MSIQHFRVALIPFFAAFCLPVFAHPETLVKVKDAEDQLGARVGYI
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promoter complement(6836..6940)
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ORIGIN

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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 ATGGCCCGCC TGGCTGACCG CCCAACGACC
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361 CCCGCCATT GACGTCAATA ATGACGTATG TTCCCATAGT AACGCCAATA GGGACTTTC
421 ATTGACGTCA ATGGGTGGAG TATTTACGGT AAAGTGCCA CTTGGCAGTA CATCAAGTGT
481 ATCATATGCC AAGTACGCCC CCTATTGACG TCAATGACGG TAAATGGCCC GCCTGGCATT
541 ATGCCCAGTA CATGACCTTA TGGGACTTTC CTACTTGCCA 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 CTGTGCCTTC TAGTTGCCAG CCATCTGTTG
1021 TTTGCCCTC CCCCCTGCCT TCCTTGACCC TGGAAGGTGC CACTCCCCT GTCTTTCCCT
1081 AATAAAATGA GGAAATTGCA TCGCATTGTC TGAGTAGGTG TCATTCTATT CTGGGGGGTG
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1261 ATCGCCACA GTCCCGAGA AGTTGGGGG AGGGTCCGC AATTGAACGG GTGCCTAGAG
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1621 CCTTTGTCCG GCGCTCCCTT GGAGCCTACC TAGACTCAGC CGGCTCTCCA CGCTTTGCCT
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1981 CTTCGGCACC TACCCAGCG GCTACGAGAA CCCCTTCTG CAGCCATCA ACAACGGCGG
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3121	GTCCACGTTT	TTTAATAGTG	GACTCTTGTT	CCAAACTGGA	ACAACACTCA	ACCCTATCTC
3181	GGTCTATTCT	TTTGATTTAT	AAGGGATTTT	GCCGATTTCG	GCCTATTGGT	TAAAAAATGA
3241	GCTGATTTAA	CAAAAATTTA	ACGCGAATTA	ATTCTGTGGA	ATGTGTGTCA	GTTAGGGTGT
3301	GGAAAGTCCC	CAGGCTCCCC	AGCAGGCAGA	AGTATGCAAA	GCATGCATCT	CAATTAGTCA
3361	GCAACCAGGT	GTGGAAAGTC	CCCAGGCTCC	CCAGCAGGCA	GAAGTATGCA	AAGCATGCAT
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3541	GAGGCCGCCT	CTGCCTCTGA	GCTATTCCAG	AAGTAGTGAG	GAGGCTTTTT	TGGAGGCCTA
3601	GGCTTTTGCA	AAAAGCTCCC	GGGAGCTTGT	ATATCCATTT	TCGGATCTGA	TCAAGAGACA
3661	GGATGAGGAT	CGTTTCGCAT	GATTGAACAA	GATGGATTGC	ACGCAGGTTT	TCCGGCCGCT
3721	TGGGTGGAGA	GGCTATTCCG	CTATGACTGG	GCACAACAGA	CAATCGGCTG	CTCTGATGCC
3781	GCCGTGTTCC	GGCTGTCAGC	GCAGGGGCGC	CCGGTTCTTT	TTGTCAAGAC	CGACCTGTCC
3841	GGTGCCCTGA	ATGAACTGCA	GGACGAGGCA	GCGCGGCTAT	CGTGGCTGGC	CACGACGGGC
3901	GTTCTTTCG	CAGCTGTGCT	CGACGTTGTC	ACTGAAGCGG	GAAGGGACTG	GCTGCTATTG
3961	GGCGAAGTGC	CGGGGCAGGA	TCTCCTGTCA	TCTCACCTTG	CTCCTGCCGA	GAAAGTATCC
4021	ATCATGGCTG	ATGCAATGCG	GCGGCTGCAT	ACGCTTGATC	CGGCTACCTG	CCCATTGCAC
4081	CACCAAGCGA	AACATCGCAT	CGAGCGAGCA	CGTACTCGGA	TGGAAGCCGG	TCTTGTGCGAT
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4201	AAGGCGCGCA	TGCCCGACGG	CGAGGATCTC	GTCGTGACCC	ATGGCGATGC	CTGCTTGCCG
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4321	GCGGACCGCT	ATCAGGACAT	AGCGTTGGCT	ACCCGTGATA	TTGCTGAAGA	GCTTGGCGGC
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4681	AAAGCAATAG	CATCACAAAT	TTCACAAATA	AAGCATTTTT	TTCACTGCAT	TCTAGTTGTG
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4801	GCTTGGCGTA	ATCATGGTCA	TAGCTGTTTC	CTGTGTGAAA	TTGTTATCCG	CTCACAATTC
4861	CACACAACAT	ACGAGCCGGA	AGCATAAAGT	GTAAAGCCTG	GGGTGCCTAA	TGAGTGAGCT
4921	AACTCACATT	AATTGCGTTG	CGCTCACTGC	CCGCTTTCCA	GTCGGGAAAC	CTGTCTGTCC
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5221	TCCATAGGCT	CCGCCCCCCT	GACGAGCATC	ACAAAAATCG	ACGCTCAAGT	CAGAGGTGGC
5281	GAAACCCGAC	AGGACTATAA	AGATACCAGG	CGTTTCCCCC	TGGAAGCTCC	CTCGTGCCTC
5341	CTCCTGTTCC	GACCCTGCCG	CTTACCGGAT	ACCTGTCCGC	CTTTCTCCCT	TCGGGAAGCG
5401	TGGCGCTTTC	TCATAGCTCA	CGCTGTAGGT	ATCTCAGTTC	GGTGTAGGTC	GTTGCTGCTCA
5461	AGCTGGGCTG	TGTGCACGAA	CCCCCGTTTC	AGCCCGACCG	CTGCGCCTTA	TCCGGTAACT
5521	ATCGTCTTGA	GTCCAACCCG	GTAAGACACG	ACTTATCGCC	ACTGGCAGCA	GCCACTGGTA
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5641 ACTACGGCTA CACTAGAAGA ACAGTATTTG GTATCTGCGC TCTGCTGAAG CCAGTTACCT
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