



LOCUS Exported 4146 bp ds-DNA circular SYN 05-MAR-2013

DEFINITION Vector that allows high-level transient expression in vertebrate cells and in vitro transcription/translation.

ACCESSION DQ649434

VERSION .

KEYWORDS pCS111

SOURCE synthetic DNA construct

ORGANISM synthetic DNA construct

REFERENCE 1 (bases 1 to 4146)

AUTHORS .

TITLE Direct Submission

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<http://www.snapgene.com>

FEATURES Location/Qualifiers

source 1..4146
 /organism="synthetic DNA construct"
 /mol_type="other DNA"

promoter 35..53
 /note="SP6 promoter"
 /note="promoter for bacteriophage SP6 RNA polymerase"

polyA_signal 187..321
 /note="SV40 poly(A) signal"

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promoter      /note="SV40 polyadenylation signal"
              complement(438..456)
              /note="T3 promoter"
              /note="promoter for bacteriophage T3 RNA polymerase"
primer_bind   complement(477..493)
              /note="M13 rev"
              /note="common sequencing primer, one of multiple
similar
              variants"
protein_bind  501..517
              /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(525..555)
              /note="lac promoter"
              /note="promoter for the E. coli lac operon"
rep_origin    complement(879..1467)
              /direction=LEFT
              /note="ori"
              /note="high-copy-number ColE1/pMB1/pBR322/pUC origin
of
              replication"
CDS           complement(1638..2498)
              /codon_start=1
              /gene="bla"
              /product="beta-lactamase"
              /note="AmpR"
              /note="confers resistance to ampicillin,
carbenicillin, and
              related antibiotics"

/translation="MSIQHFRVALIPFFAAFLPVFFAHPETLVKVKDAEDQLGARVGYI
ELDLSNGKILESFRPEERFPMMSTFKVLLCGAVLSRIDAGQEQLGRRIHYSQNDLVEYS
PVTEKHLTDGMTVRELCSAAITMSDNTAANLLLTIGGPKELTAFLHNMGDHSVTRLDRW
EPELNEAIPNDERDITMPVAMATTLRKLTLGELLTLASRQQLIDWMEADKVAGPLLRSA
LPAGWFIADKSGAGERGSRGIIAALGPDGKPSRIVVIYTTGSQATMDERNRQIAEIGAS
LIKHW"
promoter      complement(2499..2603)
              /gene="bla"
              /note="AmpR promoter"
rep_origin    complement(2629..3084)
              /direction=LEFT
              /note="f1 ori"
              /note="f1 bacteriophage origin of replication; arrow
              indicates direction of (+) strand synthesis"

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promoter          3162..4146
                  /note="CMV IE94 promoter"
                  /note="enhancer/promoter region of simian
cytomegalovirus   major immediate early transcription unit IE94"
ORIGIN
    1 cgccattctg cctgggggacg tccgagcaag cttgatttag gtgacactat
agaataacaag
    61 ctacttgttc tttttgcagg atcccatcga ttcgaattcg tcccgggaat
ctggccgcgg
    121 ccgcaaggcc tgatatctct agaccgcggc tcgagcctct cgccctatag
tgagtcgtat
    181 tacgtagatc cagacatgat aagatacatt gatgagtttg gacaaaccac
aactagaatg
    241 cagtgaaaaa aatgctttat ttgtgaaatt tgtgatgcta ttgctttatt
tgtaaccatt
    301 ataagctgca ataaacaagt taacaacaac aattgcattc attttatgtt
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    361 ggggaggtgt gggaggtttt ttaattcgcg gcgcgccgcg gcgccaatgc
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    421 gtaccagctc tttgttcctt ttagtgaggg ttaattgcgc gcttggcgta
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gctcactgac
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ggcggttaata
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cactagaagg
    1321 acagtatttg gtatctgcgc tctgctgaag ccagttacct tcggaaaaag
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2701 aggccgaaat cggcaaaatc ccttataaat caaagaata gaccgagata
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caggatcaat
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