



基本信息

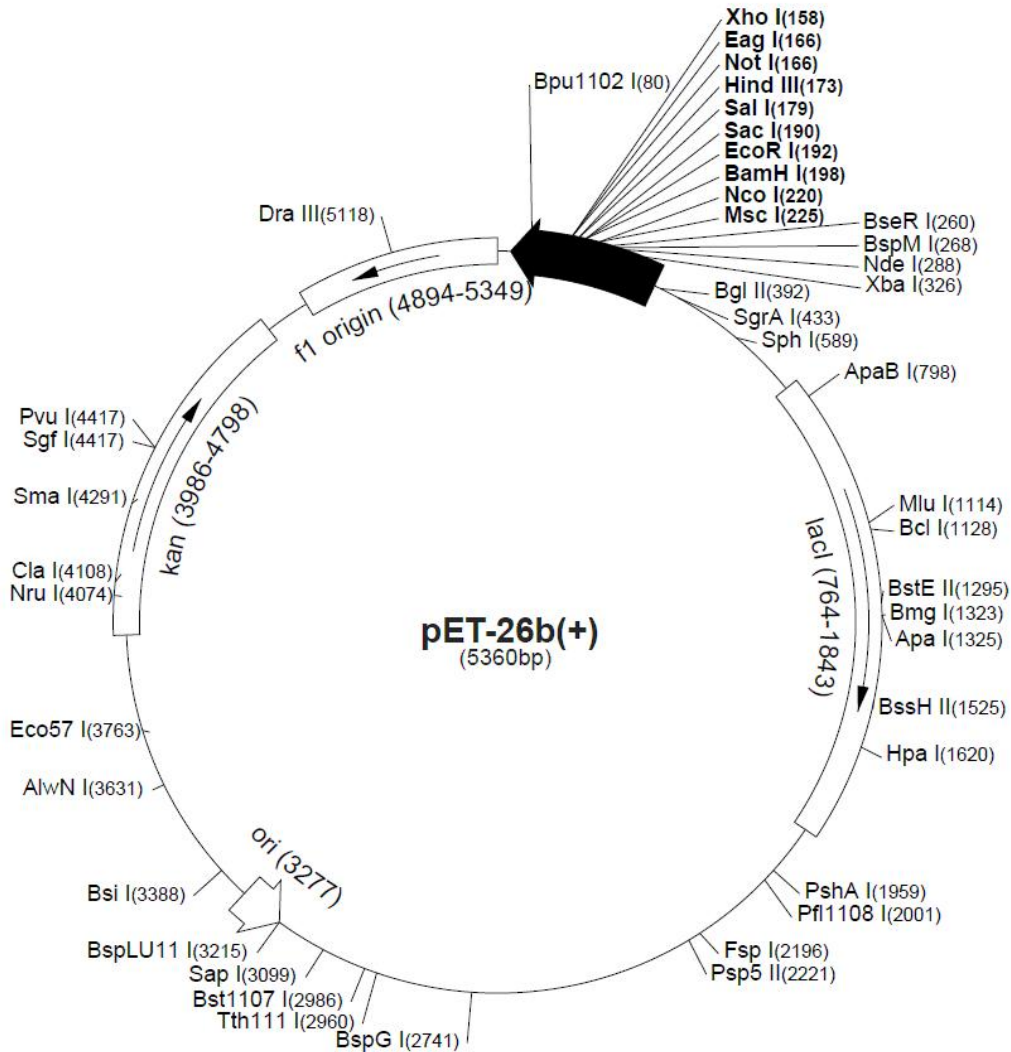
启动子:	T7/lac
平台编号	bio-82391
复制子:	ColE1 ori, F1 ori
终止子:	T7 terminator
质粒分类:	大肠杆菌载体; PET 系列表达质粒
质粒大小:	5360bp
质粒标签:	C-6×His
原核抗性:	卡那霉素 Kan
克隆菌株:	DH5α
培养条件:	37°C, 有氧, LB
表达宿主:	BL21(DE3)
诱导方式:	IPTG 或乳糖及其类似物
5'测序引物:	T7:TAATACGACTCACTATAGGG
3'测序引物:	T7-ter: TGCTAGTTATTGCTCAGCGG

备注: 分泌表达

质粒简介

The pET-26b(+) vector carries an N-terminal pelB signal sequence for potential periplasmic localization, plus optional C-terminal His•Tag® sequence. Unique sites are shown on the circle map. Note that the sequence is numbered by the pBR322 convention, so the T7 expression region is reversed on the circular map. The cloning/expression region of the coding strand transcribed by T7 RNA polymerase is shown below. The fl origin is oriented so that infection with helper phage will produce virions containing single-stranded DNA that corresponds to the coding strand. Therefore, single-stranded sequencing should be performed using the T7 terminator primer .

质粒图谱



质粒序列

```

LOCUS       Exported                               5360 bp ds-DNA   circular SYN 31-7-2015
DEFINITION  synthetic circular DNA
ACCESSION   .
VERSION     .
KEYWORDS    Untitled 2
SOURCE      synthetic DNA construct
  ORGANISM  synthetic DNA construct
REFERENCE   1 (bases 1 to 5360)
AUTHORS     .
TITLE       Direct Submission
JOURNAL     Exported 2015-7-31  MLCC
FEATURES    Location/Qualifiers
     source          1..5360
  
```



```
/organism="synthetic DNA construct"
/mol_type="other DNA"
source      297..319
            /organism="Enterobacteria phage T7"
            /mol_type="genomic DNA"
            /db_xref="taxon:10760"
terminator  26..73
            /note="T7 terminator"
            /note="transcription terminator for bacteriophage T7 RNA
polymerase"
CDS         complement(140..157)
            /codon_start=1
            /product="6xHis affinity tag"
            /note="6xHis"
            /translation="HHHHHH"
CDS         complement(224..289)
            /codon_start=1
            /gene="pelB (fragment)"
            /product="leader peptide for secretion"
            /note="pelB signal sequence"
            /translation="MKYLLPTAAAGLLLLLAAQPAMA"
RBS         297..319
            /note="efficient ribosome binding site from bacteriophage
T7 gene 10 (Olins and Rangwala, 1989)"
protein_bind 334..358
            /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(359..377)
            /note="T7 promoter"
            /note="promoter for bacteriophage T7 RNA polymerase"
promoter    686..763
            /gene="lacI"
            /note="lacI promoter"
CDS         764..1846
            /codon_start=1
            /gene="lacI"
            /product="lac repressor"
            /note="lacI"
```



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/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)."

/translation="MKPVTLYDVAEYAGVSYQTVSRVVNQASHVSAKTREKVEAAM

AEL
NYIPNRVAQQLAGKQSLIGVATSSSLALHAPSQIVAAIKSRADQLGASVVVSMVER

SGV
EACKAAVHNLQAQRVSLIINYPLDDQDAIAVEAACTNVPALFLDVSDQTPINSII

FSH
EDGTRLGVEHLVALGHQQIALLAGPLSSVSARLRLAGWHKYLTRNQIQPIAEREGD

WSA
MSGFQQTMQMLNEGIVPTAMLVANDQMALGAMRAITESGLRVGADISVVGYYDDTED

SSC
YIPPLTTIKQDFRLLGQTSVDRLLQLSQGQAVKGNQLLPVSLVKRKTTLAPNTQTA

SPR
ALADSLMQLARQVSRLESGQ"

CDS
2655..2846
/codon_start=1
/gene="rop"
/product="Rop protein, which maintains plasmids at low copy number"
/note="rop"
/translation="MTKQEKALNMARFIRSQTLTLLLEKLNELDADEQADICESLH

DHA
DELYRSCLARFGDDGENL"

misc_feature
2948..3090
/note="bom"
/note="basis of mobility region from pBR322"

rep_origin
complement(3276..3864)
/direction=LEFT
/note="ori"
/note="high-copy-number ColE1/pMB1/pBR322/pUC origin of replication"

CDS
3986..4801
/codon_start=1
/product="aminoglycoside phosphotransferase"
/note="KanR"
/note="confers resistance to kanamycin in bacteria or G418 (Geneticin(R)) in eukaryotes"
/translation="MSHIQRETSCSRPRLNSNMDADLYGYKWARDNVGQSGATIYR

LYG



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KPDAPELFLKHGKGSVANDVTDEMVRNLNWLTEFMPLPTIKHFIRTPDDAWLLTTAI

PGK

TAFQVLEEYPDSGENIVDALAVFLRRLHSIPVCNCPFNSDRVFRLAQAQSRMNNGL

VDA

SDFDDERNGWPVEQVWKEMHKLLPFSVTHGDFSLDNLIFDEGKLIIGCIDVGR

VGI

ADRYQDLAILWNCLGEFSPSLQKRLFQKYGIDNPD MNKLQFHLMLDEFF"

rep_origin

complement(4894..5349)

/direction=LEFT

/note="f1 ori"

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

ORIGIN

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121 tgtagcagc cggatctcag tgggtggtgt ggtggtgctc gactgaggcc gcaagcttgt
181 cgacggagct cgaattcggg tccgaattaa ttccgatata catggccatc gccggctggg
241 cagcagaggag cagcagacca gcagcagcgg tcggcagcag gtatttcata tgtatatctc
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361 tatagtgagt cgtattaatt tcgcccggatc gagatctcga tcctctacgc cggacgcac
421 gtggccggca tcaccggcgc cacaggtgag gttgctggcg cctatatcgc cgacatcacc
481 gatggggaag atcgggctcg ccacttcggg ctcatgagcg cttgtttcgg cgtgggatg
541 gtggcaggcc ccgtggcggg gggactggtg ggcgccatct ccttgcatgc accattcctt
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1021 cgccgatcaa ctgggtgcca gcgtggtggt gtcgatggtg gaacgaagcg gcgtcgaagc
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1561 ggatatctcg gtagtgggat acgacgatac cgaagacagc tcatgttata tcccgcggt
1621 aaccaccatc aacagcagatt ttcgctgctc ggggcaaac agcgtggacc gcttgcgca
1681 actctctcag ggccaggcgg tgaagggcaa tcagctggtg cccgtctcac tggtagaaaag
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1801 aatgcagctg gcacgacagg tttcccgact ggaaagcggg cagtgcgcgc aacgcaatta
1861 atgtaagtta gctcactcat taggcaccgg gatctcgacc gatgcccttg agagccttca
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