



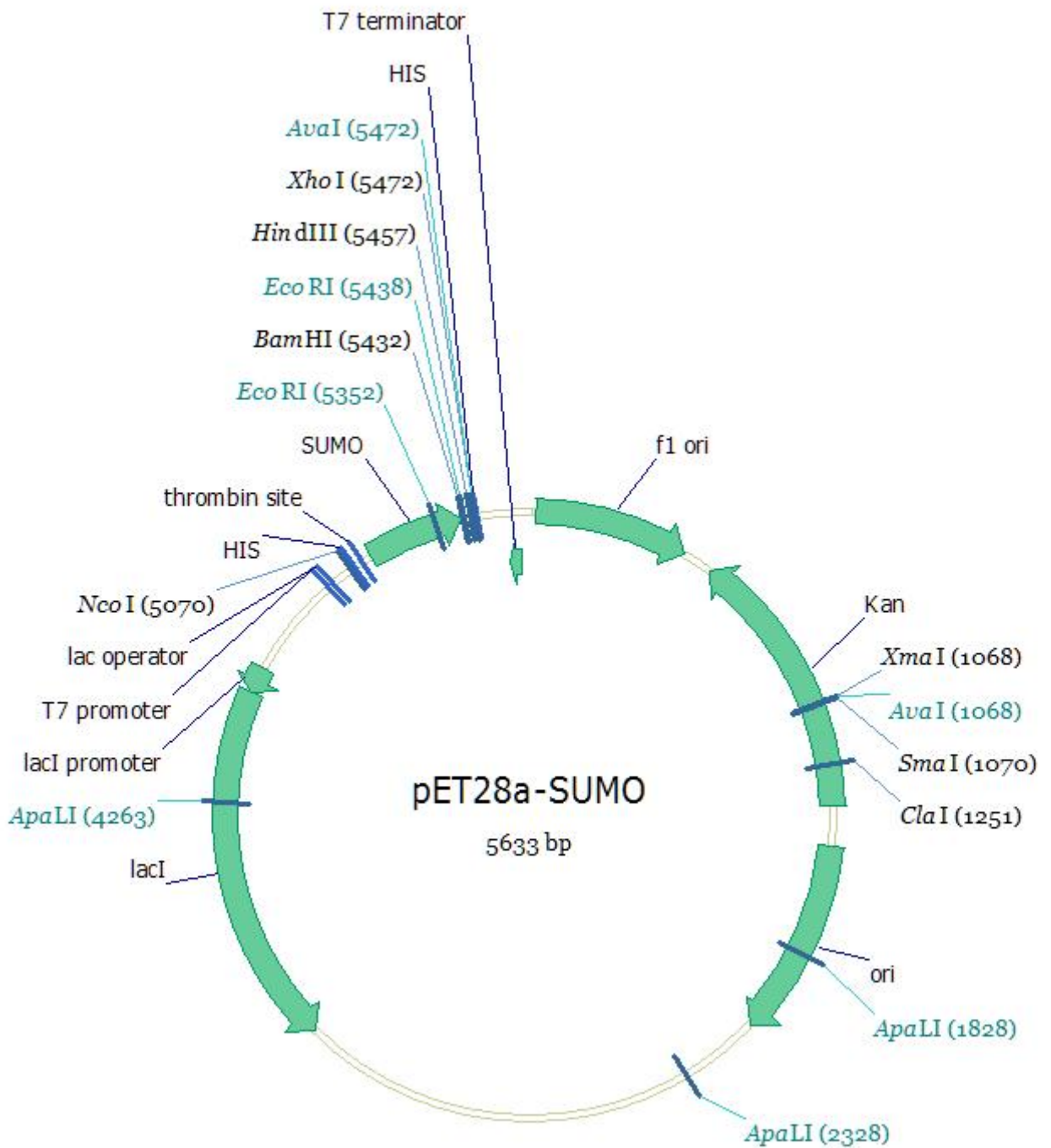
## 基本信息

启动子:	T7/lac
平台编号:	bio-82395
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:	5633bp
质粒标签:	N-6×His, N-Thrombin, N-SUMO, 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

## 质粒简介



## 质粒图谱



### 质粒序列

LOCUS Exported 5633 bp ds-DNA circular SYN 03-8-2015  
 DEFINITION synthetic circular DNA  
 ACCESSION .  
 VERSION .  
 KEYWORDS Untitled 5



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SOURCE synthetic DNA construct  
ORGANISM synthetic DNA construct  
REFERENCE 1 (bases 1 to 5633)  
AUTHORS .  
TITLE Direct Submission  
JOURNAL Exported 2015-8-3 FEATURES Location/Qualifiers

source 1..5633  
/organism="synthetic DNA construct"  
/mol\_type="other DNA"

source 5042..5064  
/organism="Enterobacteria phage T7"  
/mol\_type="genomic DNA"  
/db\_xref="taxon:10760"

rep\_origin 12..467  
/direction=RIGHT  
/note="f1 ori"  
/note="f1 bacteriophage origin of replication; arrow indicates direction of (+) strand synthesis"

CDS complement(560..1375)  
/codon\_start=1  
/product="aminoglycoside phosphotransferase"  
/note="KanR"  
/note="confers resistance to kanamycin in bacteria or G418 (Geneticin(R)) in eukaryotes"  
/translation="MSHIQRETSCSRPRLNSNMDADLYGYKWARDNVGQSGATIYR

LYG  
KPDAPFLFLKHGKGSVANDVTDEMVRNLNWLTEFMPLPTIKHFIRTPDDAWLLTTAI

PGK  
TAFQVLEEYPSGENIVDALAVFLRRLHSIPVCNCPFNSDRVFLAQASRMNGL

VDA  
SDFDDERNGWPVEQVWKEMHKLLPFSPDSVVTHGDFSLDNLIFDEGKLGICIDVGR

VGI  
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rep\_origin 1497..2085  
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/note="ori"  
/note="high-copy-number ColE1/pMB1/pBR322/pUC origin of replication"

misc\_feature 2271..2413  
/note="bom"  
/note="basis of mobility region from pBR322"

CDS complement(2515..2706)



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/codon_start=1
/gene="rop"
/product="Rop protein, which maintains plasmids at low copy
number"
/note="rop"
/translation="MTKQEK TALNMARFIRSQTLTLLLEKLNELDAEQADICESLH
DHA
DELYRSCLARFGDDGENL"
CDS
complement(3515..4597)
/codon_start=1
/gene="lacI"
/product="lac repressor"
/note="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)."
```

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/translation="MKPVTLYDVAEYAGVSYQTVSRVVNQASHVSAKTREKVEAAM
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SGV
EACKAAVHNLQAQRVSGLIINYPLDDQDAIAVEAACTNVPALFLDVSDQTPINSII
FSH
EDGTRLGVEHLVALGHQQIALLAGPLSSVSARLRRLAGWHKYLTRNQIQPIAEREGD
WSA
MSGFQQTMQMLNEGIVPTAMLVANDQMALGAMRAITESGLRVGADISVVGYYDDTED
SSC
YIPPLTTIKQDFRLLGQTSVDRLLQLSQGQAVKGNQLLPVSLVKRKTTLAPNTQTA
SPR
ALADSLMQLARQVSRLESGQ"
promoter
complement(4598..4675)
/gene="lacI"
/note="lacI promoter"
promoter
4984..5002
/note="T7 promoter"
/note="promoter for bacteriophage T7 RNA polymerase"
protein_bind
5003..5027
/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
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isopropyl-beta-D-thiogalactopyranoside (IPTG)."

RBS 5042..5064  
/note="efficient ribosome binding site from bacteriophage T7 gene 10 (Olins and Rangwala, 1989)"

CDS 5083..5100  
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/note="6xHis"  
/translation="HHHHHH"

CDS 5110..5127  
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/product="thrombin recognition and cleavage site"  
/note="thrombin site"  
/translation="LVPRGS"

CDS 5140..5430  
/codon\_start=1  
/gene="S. cerevisiae SMT3 (truncated)"  
/product="cleavable ubiquitin-like protein tag"  
/note="SUMO"  
/translation="MSDSEVNQEAKPEVKPEVKPETHINLKVSDGSSEIFFKIKKT"

TPL  
RRLMEAFAKRQ GKEMDSL RFLYD GIRIQADQTPEDLDMEDNDIIEAHREQIG"

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/note="6xHis"  
/translation="HHHHHH"

terminator 5561..5608  
/note="T7 terminator"  
/note="transcription terminator for bacteriophage T7 RNA polymerase"

ORIGIN

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