



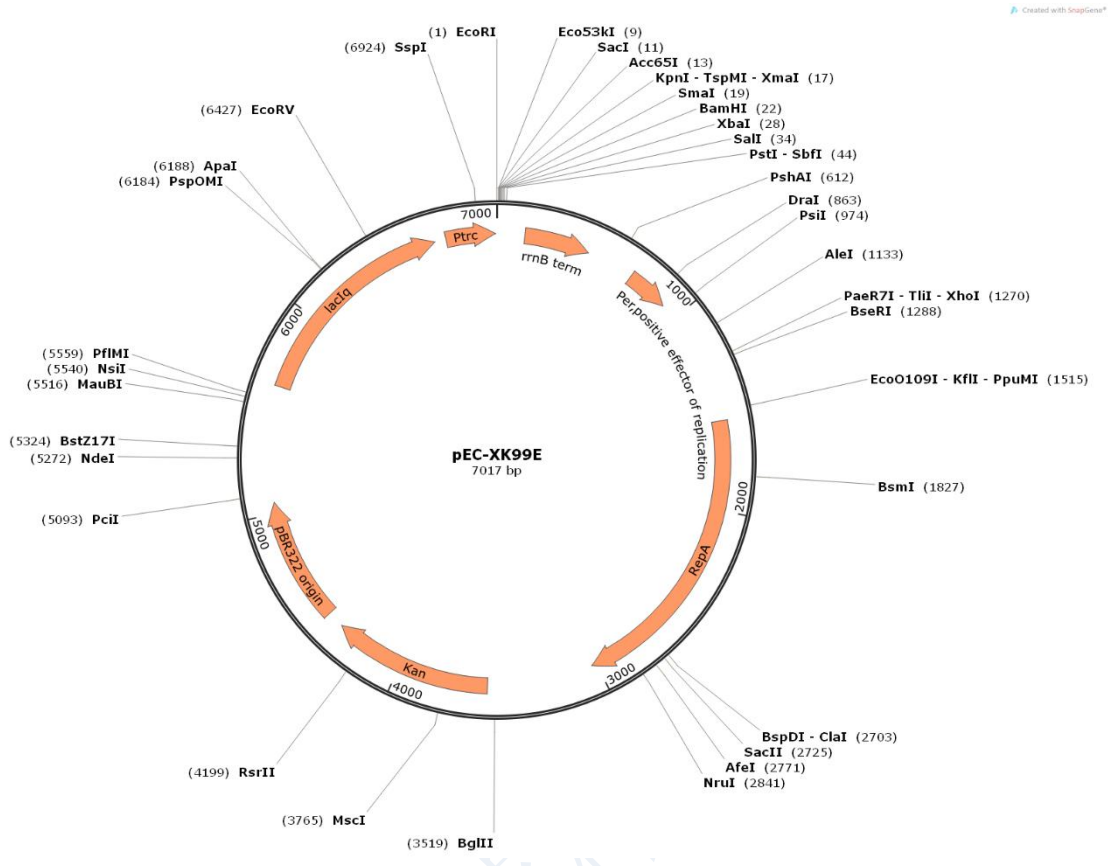
## 基本信息

启动子:	Trc promoter
平台编号:	bio-82369
复制子:	RepA,pBR322
终止子:	RmB
质粒分类:	蛋白表达质粒
质粒大小:	7017bp
质粒标签:	-
原核抗性:	卡那霉素 Kan (50 $\mu$ g/ml)
筛选标记:	-
克隆菌株:	DH5 $\alpha$ 等大肠杆菌
培养条件:	37 $^{\circ}$ C, 有氧 LB
表达宿主:	谷氨酸棒状杆菌
诱导方式:	IPTG
5'测序引物:	pEC-1 gaattcgagctcgggtaccgggg
3'测序引物:	
备注:	谷氨酸棒状杆菌表达质粒

质粒简介

pEC-XK99E

质粒图谱



## 质粒序列

```

gaattcgagctcggtagccgggatcctctagagtcgacctgcaggcatgcaagcttggctgttt
tggcggatgagagaagattttcagcctgatacagattaaatcagaacgcagaagcggcttgataa
aacagaatttgctggcggcagtagcgcgggtggtcccacctgacccatgccgaactcagaagtg
aaacgccgtagcgcgatggttagtggtggtctccccatgacgagagtagggaactgccaggcatc
aaataaacgaaaggctcagtcgaaagactgggcctttcgttttatctgttgtttgctcgtgaac
gctctcctgagtaggacaaatccgccgggagcggatttgaacgcttgcgaagcaacggcccggagg
gtggcgggcaggacgcccgcataaactgccaggcatcaaattaagcagaaggccatcctgacgg
atggcctttttgcttttctacaaactcttttggtttatcttaatacattcaaataatgtatcc
gctcatgaattaattccgctagatgacgtgcccgttcgacctcctgggcgtggcgttgttggcg
cgctcgcggctggctgcgacgacgcgtctgagcagatatttgcgccgctcctcgtgggtc
aggccgggtgggatcaggccaccgcagtaggcgcagctgatgcgatcctccactactgcgcgtc
ctcctggcgtgccgagcagcagctcgtcggccagctcttcaaggctggccacaagcgtttcta
ggctcgtcgcggcacttgcccagtcgctgatgctggcgcgtctgtcgtatcgagggcgcggaaa
aatccgatcaccgtttttaaatcgacggcggcatcgagtgctcggactccagcgcgacatcgga
gagatccaccgctgatgcttcaggccagttttggtacttcgtcgtgaaggatcatgacaccattat
aacgaacgttcgttaaaaattctagcccaattctgataatttcttccggcactcctgcgaaaac
ctgcgagacttcttgcccagaaaaaacgccaagcgcagcgggtaccgcacttttttccagggtga
tttccacctgaccagcgaagcggcacttttagtgcgatgaggtgtgccctgggtttcccctctttgg
    
```



aggggtcaacccaaaaaagcacacaagcaaaaatgaaaatcatcatgagcaagttggtgcaagc  
agcaacgcgctagctccaaaaaggtctccaggatctcgaggagatTTTTGAGGGGGAGGGAGTCG  
aggaagagccagagcagaaggcggggaaccgttctctgccgacagcgtgagcccccttaaaat  
caggccgggaggaaccggggagggatcagagctaggagcgagacaccctaaagggggggaaccg  
TTTTctgctgacggtgtttcgTTTTattagTTTTcagcccgtggatagcggaggggtgagggcaagt  
gagagccagagcaaggacgggaccctaaaggggggaaccgtTTTTctgctgacggtgtttcgTTTT  
attagTTTTcagcccgtggacggccgcgttttagcttccattccaagtgcTTTTctgacttgttg  
atgCGCTTtactgacacctagttCGCTGCAAGCTCACGAGTCGAGGGATCAGCAACCGATTG  
agaacgggcatccaggatcgcagttttgacgcgaagttcGAGCAACTCGCCTGTCAATTTCTCGGC  
gtttgtttgcttccgctaatacgtgtcgcgtctcctgCGCATACTTACTTTCTGGGTCAGCCCAT  
ctgCGTGCATTCGATGTAGCTGCGCCCCGTGCCCCATCGTCGCTAGAGCTTTCGCCCCGTGCT  
gctctgCGTTTTCCACCAGCAGGACGACTGGCTGGCCTTTAGCCAGTAGCCGCGCACAC  
GACGCGCATCGTCAGGCGATCACGATGGCGGGAAGATCCGGTCCCGGCCGTCTGCACCGACC  
GCCTGGGCAACGTTGTACGCCACTTCATACGCGTCGATGATCTTGGCATCTTTTAGCGCTCAC  
AGCAGCTTTGAGCTGGTATCCCACGGTCAACGCGTGGCGAAACGCGGTCTCGTCGCGCTCGCT  
CTGGATTTGTCCAGAGCACTCGCACGCCGTGATCAGGTCGCGGACGCGTCCAGGGCGCTCGGC  
AGGCTCGCTCCAAAATCGCTAGCGCTTGGCTTCTGCGGTGGCGCTTGTGCCGCTTCAATGCG  
GGCGCTCCGCTGGAAAAGTCTGCTCAATGTACTTTTTCGGCTTCTGTGATCCGGTCACTGCTC  
GAGCAATCTCCATTAGGTCGGCCAGCCGATCCACACGATCATGCTGGCAGTGCCATTTATAGGCT  
GTCCGATCGTCTGAGACGTGCAGCGGCCACCGGCTCAGCCTATGCGAAAAGCCTGGTCAGCGC  
GAAAACACGAGTCATTTCTCCGTGTTGAGCCAGCAGGCGCATATTTGGGCTGGTTTACCTG  
CTGCGGCATACACCGGGTCAATGAGCCAGATGAGCTGGCATTTCGCTCAGCGGATTCAGCCG  
ATCCAAGCCGGCGCTTTTTCTAGGCGTGCCATTTCTCTAAAATCGCGTAGACCTGCGGGTTTAC  
GTGCTCAATCTTCCGCGGGCTGGTGGTGGGCACATCGATGTCAAGCACGATCACCGCGGAT  
GTTGCGCTGCGTCAGCGCAACGTACTGGCACCGCGTCAGCGCTTTGAGCCAGCCCGGTAGAGC  
TTTGGTTGGTTTTCGCCGGTATCCGGTTTTTAAATCCAGGCGCTCGCGAAATCTCTGTCTTGCT  
GCCCTGGAAGCTTTCGCTCCAGGTGAGCGAGCAGTTCTCGCGGATCTTCTGCGCTCCAGCCG  
GTGAGCCGAGCGCATAGCTTCGGGTGGTGTGCAACAGATCGGCGGACAATTTCCACGCGCTA  
GCTGTGACTGTGCTGCGGATCGGCTAGAGTCATGTCTTGAGTGCTTCTCCAGCTGATGACT  
GGGGTTAGCCGACGCCCTGTGAGTTCCGCTCACGGGGCGTTCAACTTTTTCAGGTATTTGTG  
AGCTTATCGTGTCTTCTCGTAAATGAACGCTTAACCTTGTTAAACGTGGCAAATAGGCAGG  
ATTGATGGGGATCTAGCTTCCAGCTGCCGCAAGCACTCAGGGCGCAAGGGCTGCTAAAGGAAGCG  
GAACAGTAGAAAAGCCAGTCCGCAGAAAAGGTGCTGACCCCGGATGAATGTCAGCTACTGGGCTA  
TCTGGACAAGGAAAACGCAAGCGCAAAGAGAAAGCAGGTAGCTTGCAGTGGGCTTACATGGCGA  
TAGCTAGACTGGGCGTTTTATGGACAGCAAGCGAACCAGGAATTGCCAGCTGGGGCGCCCTCTGG  
TAAGGTTGGGAAGCCCTGCAAAGTAAACTGGATGGCTTCTTGGCCCAAGGATCTGATGGCGCA  
GGGGATCAAGATCTGATCAAGAGACAGGATGAGGATCGTTTTCGCATGATTGAACAAGATGGATTG  
CACGAGGTTCTCCGGCCGCTTGGTGGAGAGGCTATTCCGCTATGACTGGGCACAACAGACAAT  
CGGCTGCTCTGATGCCGCCGTGTTCCGGCTGTCAGCGCAGGGGCGCCCGGTTCTTTTTGTCAAGA  
CCGACCTGTCCGGTGCCCTGAATGAACCTCAAGACGAGGCAGCGCGGCTATCGTGGCTGGCCAG  
ACGGGCGTCTTCTGCGCAGCTGTGCTCGACGTTGTCACTGAAGCGGGAAGGGACTGGCTGCTATT  
GGGCGAAGTGCCGGGGCAGGATCTCCTGTCACTCTCACCTTGTCTCTGCCGAGAAAAGTATCCATCA



tggctgatgcaatgcggcggctgcatacgcttgatccggctacctgccattcgaccaccaagcg  
aaacatcgcacgcagcgcagcactcggatggaagccggtcctgtcgatcaggatgatctgga  
cgaagagcatcaggggctcgcgccagccgaactggtcgcaggtcaagggcgggatgcccgacg  
gcgaggatctcgtcgtgacctggcgatgcctgcttgccgaatatcatgggtggaaaatggccgc  
tttctggattcatcgactgtggccggctgggtgtggcgaccgctatcaggacatagcgttggc  
taccctgatattgctgaagagcttggcggcgaatgggtgaccgcttctcctcgtgctttacggt  
tcgccgctcccgattcgcagcgcacgccttctatcgccttcttgacgagttcttctgagcggga  
ctctggggttcgcggaatcatgacaaaatcccttaacgtgagtttctgcttccactgagcgtcag  
accccgtagaaaagatcaaaggatcttcttgagatcctttttctgcgcgtaaatctgctgcttg  
caaacaaaaaaaccaccgctaccagcgggtggttgggttgcggatcaagagctaccaactcttt  
tccgaaggtaactggcttcagcagagcgcagataccaaatactgtccttctagtgtagccgtagt  
taggccaccacttcaagaactctgtagcaccgctacatacctcgcctctgctaatacctgttacca  
gtggctgctgccagtggcgataagtcgtgtcttaccgggttgactcaagacgatagttaccgga  
taaggcgcagcggctcgggctgaacggggggtcgtgcacacagcccagcttgagcgaacgacct  
acaccgaactgagatacctacagcgtgagctatgagaaagcgcacgcttcccgaaggagaaaag  
gcggacaggtatccggtgaagcggcagggctcggaaacaggagagcgcacgagggagcttccagggg  
aaacgcctggatctttatagtcctgtcgggttgcgccactctgacttgagcgtcgattttgt  
gatgctcgtcagggggcggagcctatggaaaaacgccagcaacgcggcctttttacggttctg  
gccttttctgctggccttttctcaccatgttcttctcctcgcgttatcccctgattctgtggataaccg  
tattaccgctttgagtgagctgataccgctcgcgcagccgaacgaccgagcgcagcagtcag  
tgagcaggaagcggaaagagcgcctgatgcggtatcttctccttacgcatctgtgcggtatctca  
caccgcatatggtgcactctcagtaaatctgctctgatgccgcatagttaaagccagtatacact  
ccgctatcgcctacgtgactgggtcatggctgcgccccgacaccgccaacaccgctgacgcgcc  
ctgacgggcttgtctgctcccggcatccgcttacagacaagctgtgaccgtctccgggagctgca  
tgtgtcagaggttttaccgctcatcaccgaaacgcgcgagggcagcagatcaattcgcgcgcgaag  
gcgaagcggcatgcatttacgttgaccatcgaatgggtgcaaacctttcgcggatggtatggaatga  
tagcgcggcgaagagagtcattcaggggtggtgaatgtgaaaccagtaacgttatacagatgtcgc  
agagtatgccggtgtctcttatcagaccgttcccgcgtggtgaaccaggccagccacgtttctg  
cgaaaacgcgggaaaaagtggaagcggcagtgggcgagctgaattacattcccacccgctggca  
caacaactggcgggcaaacagtcgttctgctgattggcgttgccacctccagtcctggcctgcacgc  
gccgtcgcgaattgtcgcggcgattaaatctcgcgcgcgatcaactgggtgccagcgtggtggtgt  
cgatggtagaacgaagcggcgtcgaagcctgtaaagcggcgggtgcacaatcttctcgcgcaacgc  
gtcagtggtgatcattaactatccgctggatgaccaggatgccattgctgtggaagctgcctg  
cactaatgttccggcgttatttcttgatgtctctgaccagacacctcaacagattattttct  
cccatgaagacggtacgcgactggcgtggagcatctggtcgcattgggtcaccagcaaatcgcg  
ctggttagcgggccattaagtctgtctcggcgcgtctcgcctggtggtggcataaatact  
cactcgcgaatcaaatcagccgatagcggaaacgggaaggcactggagtgccatgtccggttttc  
aacaacatgcaaatgctgaatgagggcatcgttcccactgcgatgctggttgccaacgatcag  
atggcgcctgggcaatgcgcgccattaccgagtcgggctgcgcgttgggtgcggaatactcggg  
agtgggatacgcgataaccgaagacagctcatgttatatcccgcgtcaaccacctcaaacagg  
atttctgcctgctggggcaaacagcgtggaccgcttctgctgcaactctctcagggccagcgggtg  
aagggcaatcagctggtgcccgtctcactggtgaaaagaaaaaccacctggcgcgccaatacgc



## 微生物菌种查询网

---

aaccgcctctccccgcgcggttggccgattcattaatgcagctggcacgacaggtttcccgactgg  
aaagcgggcagtgagcgcgaacgcaattaatgtgagttagcgcgaattgatctggttgacagctt  
atcatcgactgcacggtgcaccaatgcttctggcgtcaggcagccatcggaagctgtggtatggc  
tgtgcaggtcgtaaactactgcataattcgtgctcgtcaaggcgcactcccgttctggataatgt  
tttttgcgccgacatcataacggttctggcaaataattctgaaatgagctggttgacaattaatcat  
ccggctcgtataatgtgtggaattgtgagcggataacaatttcacacaggaaacagaccatg

微生物菌种查询网