pYES2

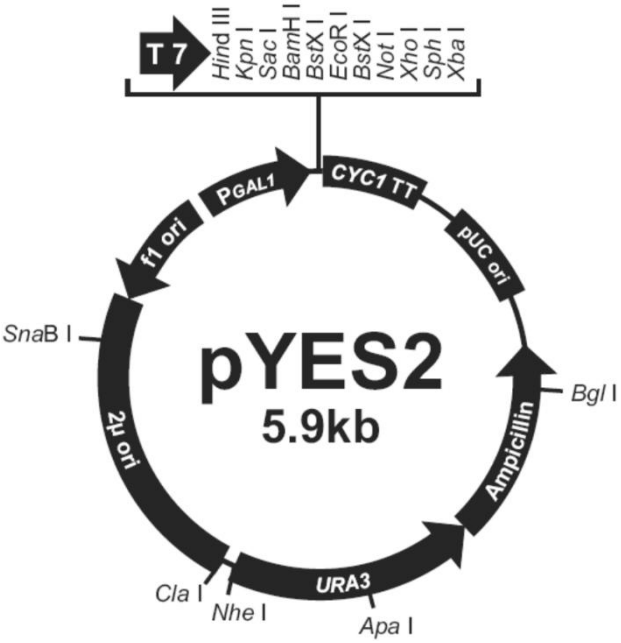
载体基本信息

出品公司：Invitrogen
载体名称：pYES2
质粒类型：酿酒酵母蛋白表达载体
表达水平：高拷贝
诱导方法：半乳糖
启动子：GAL1
克隆方法：多克隆位点，限制性内切酶
载体大小：5857 bp
5' 测序引物及序列：T7: TAATACGACTCACTATAGGG
3' 测序引物及序列：CYC1 Terminator: GTGACATAACTAATTACATGATG
载体抗性：氨苄
筛选标记：URA3
备注：利用半乳糖诱导蛋白在酿酒酵母中表达。
稳定性：稳定 Stable
组成型/诱导型：诱导型
病毒/非病毒：非病毒

使用说明：

1.建议收到质粒后请先转化感受态（克隆菌株），再挑选单菌落重新提取后使用。
2.转化前请准确查找该质粒对应的抗生素、抗生素浓度、感受态（克隆菌株）和培养温度。
3.如有必要请测序后使用。

载体质粒图谱和多克隆位点信息



Multiple Cloning Site of pYES2

Below is a diagram of the *GAL1* promoter and the multiple cloning site for pYES2. Features of the *GAL1* promoter are marked as per Giniger *et al.*, 1985, Johnston and Davis, 1984, and Yocum *et al.*, 1984. Restriction sites are labeled to indicate the cleavage site. Potential stop codons are underlined. The multiple cloning site has been confirmed by sequencing and functional testing. The vector sequence of pYES2 is available for downloading from our website (www.invitrogen.com) or from Technical Support (see page 17).

*Note that there are two *Bst*X I sites in the polylinker.

LOCUS pYES2 5857 bp DNA circular SYN
DEFINITION pYES2
ACCESSION
KEYWORDS
SOURCE
ORGANISM other sequences; artificial sequences; vectors.
FEATURES Location/Qualifiers
source 1..5857
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/mol_type="other DNA"
terminator complement(12..251)
/label="CYC1_terminator"
misc_feature 218..236

/label="pYESTrp_rev_primer"
misc_feature 218..236
/label="CYC1_primer"
promoter complement(368..386)
/label="T7_promoter"
promoter complement(410..861)
/label="GAL1_promoter"
misc_feature complement(424..447)
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rep_origin complement(1402..2873)
/label="2micron_origin"
rep_origin 1404..2283
/label="2micron2_origin"
promoter 2876..3101
/label="URA3_promoter"
gene 3103..3903
/label="URA3"
/gene="URA3"
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/label="ORF frame 1"
CDS complement(3138..3614)
/label="ORF frame 3"
gene 4002..4862
/label="Ampicillin (variant)"
/gene="Ampicillin (variant)"
CDS 4002..4625
/label="ORF frame 3"
rep_origin 5017..5636
/label="pBR322_origin"

载体简介

pYES2 的是一个 5.9 kb 的载体，设计用来在酿酒酵母（Saccharomyces cerevisiae）中诱导表达重组蛋白。载体的特点在于基因插入载体的构建简单，以及能够使用原养型尿嘧啶进行转化株的筛选。

该载体包含以下元素：

1. 酵母 GAL1 启动子，能够在酿酒酵母中被半乳糖高水平的诱导蛋白表达目的蛋白，同时能够被葡萄糖抑制表达

2.多克隆位点可以使用的很多限制酶切位点，便于基因插入。

3.CYC1 终止子能够有效终止 mRNA 的转录。

4.能够利用 URA3 基因筛选带有 ura3 基因型的酵母宿主菌株转化子。

5.氨苄抗性基因能够方便在大肠杆菌中的进行载体筛选。

载体序列：

1 GGCCGCAAAT TAAAGCCTTC GAGCGTCCCA AAACCTTCTC AAGCAAGGTT TTCAGTATAA

61 TGTTACATGC GTACACGCGT CTGTACAGAA AAAAAAGAAA AATTTGAAAT ATAAATAACG
121 TTCTTAATAC TAACATAACT ATAAAAAAAT AAATAGGGAC CTAGACTTCA GGTTGTCTAA
181 CTCCTTCCTT TTCGGTTAGA GCGGATGTGG GGGGAGGGCG TGAATGTAAG CGTGACATAA
241 CTAATTACAT GATGCGGCCC TCTAGATGCA TGCTCGAGCG GCCGCCAGTG TGATGGATAT
301 CTGCAGAATT CCAGCACACT GGCGGCCGTT ACTAGTGGAT CCGAGCTCGG TACCAAGCTT
361 AATATTCCCT ATAGTGAGTC GTATTACAGC TGCTAGTAGT CCGATCCGGG GTTTTTTCTC
421 CTTGACGTTA AAGTATAGAG GTATATTAAC AATTTTTTGT TGATACTTTT ATTACATTTG
481 AATAAGAAGT AATACAAACC GAAAATGTTG AAAGTATTAG TTAAAGTGGT TAATGCAGTT
541 TTTGCATTTA TATATCTGTT AATAGATCAA AAATCATCGC TTCGCTGATT AATTACCCCA
601 GAAATAAGGC TAAAAAACTA ATCGCATTAT CATCCTATGG TTGTTAATTT GATTCGTTCA
661 TTTGAAGGTT TGTGGGGCCA GGTTACTGCC AATTTTTCCT CTTCATAACC ATAAAAGCTA
721 GTATTGTAGA ATCTTTATTG TTCGGAGCAG TGCGGCGCGA GGCACATCTG CGTTTCAGGA
781 ACGCGACCGG TGAGGACGAG GACGCACGGA GGAGAGTCTT CCTTCGGAGG GCTGTCACCC
841 GCTCGGCGGC TTCTAATCCG TACTAGTGGA TCATCCCCAC GCGCCCTGTA GCGCCCCATT
901 AAGCGCGGCG GGTGTGGTGG TTACGCCCAG CGTGACCCCT ACACTTCCCA CCGCCCTAGC
961 CCCCGCTCCT TTCGCTTTCT TCCCTTCCTT TCTCGCCACG TTCGCCGGCT TTCCCCGTCA
1021 AGCTCTAAAT GGGGGCATCC GTTTACCCTT CCGATTTACT GCTTTACGGC ACCTCGACCC
1081 CAAAAAACTT GATTAGGGTG ATGGTTCACG TAGTGGGCCA TCGCCCTGAT AGACCCTTTT
1141 TCGCCCTTTG ACGTTGGAGT CCACGTTCTT TAATAGTGGA CTCTTGTTGG AAACTGGAAC
1201 AACACTCAAC CCTATCTCGG TCTATTCTTT TGATTTATAA GGGATTTTGC CGATTTCGGG
1261 CTATTCGTTA AAAAATGAGC TGATTTAACA AAAATTTAAC GCGAATTTTA ACAAAATATT
1321 AACGTTTACA ATTTAAATAT TTGCTTATAC AATCTTCCTG TTTTTGGGGC TTTTCTGATT
1381 ATCAACCGGG GTGGAGCTTC CCATTGCGAA TACCGCTTCC ACAAACATTG CTCAAAAGTA
1441 TCTCTTTGCT ATATATCTCT GTGCTATATC CCTATATAAC CTACCCATCC ACCTTTCGCT
1501 CCTTGAACTT GCATCTAAAC TCGACCTCTA CATTTTTTAT GTTTATCTCT AGTATTACTC
1561 TTTAGACAAA AAAATTGTAG TAAGAACTAT TCATAGAGTG AATCGAAAAC AATACGAAAA
1621 TGTAAACATT TCCTATACGT AGTATATAGA GACAAAATAG AAGAAACCGT TCATAATTTT
1681 CTGACCAATG AAGAATCATC AACGCTATCA CTTTCTGTTC ACAAAGTATG CGCAATCCAC
1741 ATCGGTATAG AATATAATCG GGGATGCCTT TATCTTGAAA AAATGCACCC GCAGCTTCGC
1801 TAGTAATCAG TAAACGCGGG AAGTGGAGTC AGGCTTTTTT TATGGAAGAG AAAATAGACA
1861 CCAAAGTAGC CTTCTTCTAA CCTTAACGGA CCTACAGTGC AAAAAGTTAT CAAGAGACTG
1921 CATTATAGAG CGCACAAAGG AGAAAAAAAG TAATCTAAGA TGCTTTGTTA GAAAAATAGC
1981 GCTCTCGGGA TGCATTTTTG TAGAACAAAA AAGAAGTATA GATTCTTTGT TGGTAAAATA
2041 GCGCTCTCGC GTTGCATTTC TGTTCTGTAA AAATGCAGCT CAGATTCTTT GTTTGAAAAA
2101 TTAGCGCTCT CGTCGCGTTG CATTTTTGTT TTACAAAAAT GAAGCACAGA TTCTTCGTTG
2161 GTAAAATAGC GCTTTCGCGT TGCATTTCTG TTCTGTAAAA ATGCAGCTCA GATTCTTTGT
2221 TTGAAAAATT AGCGCTCTCG CGTTGCATTT TTGTTCTACA AAATGAAGCA CAGATGCTTC
2281 GTTAACAAAG ATATGCTATT GAAGTGCAAG ATGGAAACGC AGAAAATGAA CCGGGGATGC
2341 GACGTGCAAG ATTACCTATG CAATAGATGC AATAGTTTCT CCAGGAACCG AAATACATAC
2401 ATTGTCTTCC GTAAAGCGCT AGACTATATA TTATTATACA GGTTCAAATA TACTATCTGT
2461 TTCAGGGAAA ACTCCCAGGT TCGGATGTTC AAAATTCAAT GATGGGTAAC AAGTACGATC
2521 GTAAATCTGT AAAACAGTTT GTCGGATATT AGGCTGTATC TCCTCAAAGC GTATTCGAAT

2581 ATCATTGAGA AGCTGCAGCG TCACATCGGA TAATAATGAT GGCAGCCATT GTAGAAGTGC
2641 CTTTTGCATT TCTAGTCTCT TTCTCGGTCT AGCTAGTTTT ACTACATCGC GAAGATAGAA
2701 TCTTAGATCA CACTGCCTTT GCTGAGCTGG ATCAATAGAG TAACAAAAGA GTGGTAAGGC
2761 CTCGTTAAAG GACAAGGACC TGAGCGGAAG TGTATCGTAC AGTAGACGGA GTATCTAGTA
2821 TAGTCTATAG TCCGTGGAAT TAATTCTCAT CTTTGACAGC TTATCATCGA TAAGCTAGCT
2881 TTTCAATTCA ATTCATCATT TTTTTTTTAT TCTTTTTTTT GATTTCGGTT TCTTTGAAAT
2941 TTTTTTGATT CGGTAATCTC CGAACAGAAG GAAGAACGAA GGAAGGAGCA CAGACTTAGA
3001 TTGGTATATA TACGCATATG TAGTGTTGAA GAAACATGAA ATTGCCCAGT ATTCTTAACC
3061 CAACTGCACA GAACAAAAAC CTGCAGGAAA CGAAGATAAA TCATGTCGAA AGCTACATAT
3121 AAGGAACGTG CTGCTACTCA TCCTAGTCCT GTTGCTGCCA AGCTATTTAA TATCATGCAC
3181 GAAAAGCAAA CAAACTTGTG TGCTTCATTG GATGTTCGTA CCACCAAGGA ATTACTGGAG
3241 TTAGTTGAAG CATTAGGTCC CAAAATTTGT TTACTAAAAA CACATGTGGA TATCTTGACT
3301 GATTTTTCCA TGGAGGGCAC AGTTAAGCCG CTAAAGGCAT TATCCGCCAA GTACAATTTT
3361 TTACTCTTCG AAGACAGAAA ATTTGCTGAC ATTGGTAATA CAGTCAAATT GCAGTACTCT
3421 GCGGGTGTAT ACAGAATAGC AGAATGGGCA GACATTACGA ATGCACACGG TGTGGTGGGC
3481 CCAGGTATTG TTAGCGGTTT GAAGCAGGCG GCAGAAGAAG TAACAAAGGA ACCTAGAGGC
3541 CTTTTGATGT TAGCAGAATT GTCATGCAAG GGCTCCCTAT CTACTGGAGA ATATACTAAG
3601 GGTACTGTTG ACATTGCGAA GAGCGACAAA GATTTTGTTA TCGGCTTTAT TGCTCAAAGA
3661 GACATGGGTG GAAGAGATGA AGGTTACGAT TGGTTGATTA TGACACCCGG TGTGGGTTTA
3721 GATGACAAGG GAGACGCATT GGGTCAACAG TATAGAACCG TGGATGATGT GGTCTCTACA
3781 GGATCTGACA TTATTATTGT TGGAAGAGGA CTATTTGCAA AGGGAAGGGA TGCTAAGGTA
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3901 AACTAAAAAA CTGTATTATA AGTAAATGCA TGTATACTAA ACTCACAAAT TAGAGCTTCA
3961 ATTTAATTAT ATCAGTTATT ACCCATTGAA AAAGGAAGAG TATGAGTATT CAACATTTCC
4021 GTGTCGCCCT TATTCCCTTT TTTGCGGCAT TTTGCCTTCC TGTTTTTGCT CACCCAGAAA
4081 CGCTGGTGAA AGTAAAAGAT GCTGAAGATC AGTTGGGTGC ACGAGTGGGT TACATCGAAC
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4321 CAGAAAAGCA TCTTACGGAT GGCATGACAG TAAGAGAATT ATGCAGTGCT GCCATAACCA
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4441 CCGCTTTTTT GCACAACATG GGGGATCATG TAACTCGCCT TGATCGTTGG GAACCGGAGC
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