Catalog No. BAM-02-701-EX

cDNA Library, *S. cerevisiae*, Log Phase

BACKGROUND

This cDNA li brary (pla smid DNA) is constructed from *Saccharomyces cerevisiae*, strain S288C-d erived poly(A)$^+$ RNA at the log phase by the Linker -Primer method (Ref .1) by Prof. H. Nojim a of Osa ka University. This library is unid irectionally cloned by usin g the oligo (d T)$_{18}$ linker p rimer which contains the restriction en zyme site of *Not*I, and *Bam*HI (*Bgl*II)-*Sma*I adaptor.

The pLZ3 ve ctor (shown below) used i n this lib rary can not replicate in *S. cerevisiae* but contains p UCori for replication in *E. coli*.

Applications:
PCR screening of known or unknown gene: Prepare the primers for the known or unknown gene (cDNA) and amplify the gene by PCR from this library followed by cloning to an appropriate vector.

Standard amplifying conditions: 35 cycles of PCR reactions using 10-100 ng of cDNA as a template. (Change the quantity of template and the number of cycles depending on the expression rate of mRNA of the objective gene.)

Size:
500 ng (40 ng/ul, 13ul) in 10 mM Tris-HCl-1mM EDTA (pH 7.5)

Quality:
1) Number of independent clones: 3.6×10^6
2) Average insert size : longer than 1 kb

Storage:
Store at -20°C

References:
Construction of this library is described in Supplementary dat a of Ref.3

1) Kobori M *et al* "Large scale isolation of osteoclast-specif ic gen es by an improv ed method involving the preparation of a subtracted cDNA library." *Genes Cells* **3**: 459-475 (1998) PMID: 9753427

2) Tanaka S and Nojima H "Nik1: a Nim1-like protein kinase of S. cerevisiae interacts with the Cdc28 complex and regulates cell cycle progression." *Genes Cells* **1**, 905-921 (1996) PMID: 9077450

3) Tougan T, Okuzaki D, Nojima H . Chum -RNA a llows prep aration of a high- quality cDNA librar y from a single-cell quan tity of mRNA without P CR a mplification. Nucleic. A cids Re s., 36(15):e9 2, (2008) PMID:18603591

Note

* This library is to be used only by the purchaser. It is not allowed to amplify and transfer the library to a third person.
* Related products: human tissue specific cDNA libraries and cDNA libraries of model organisms.
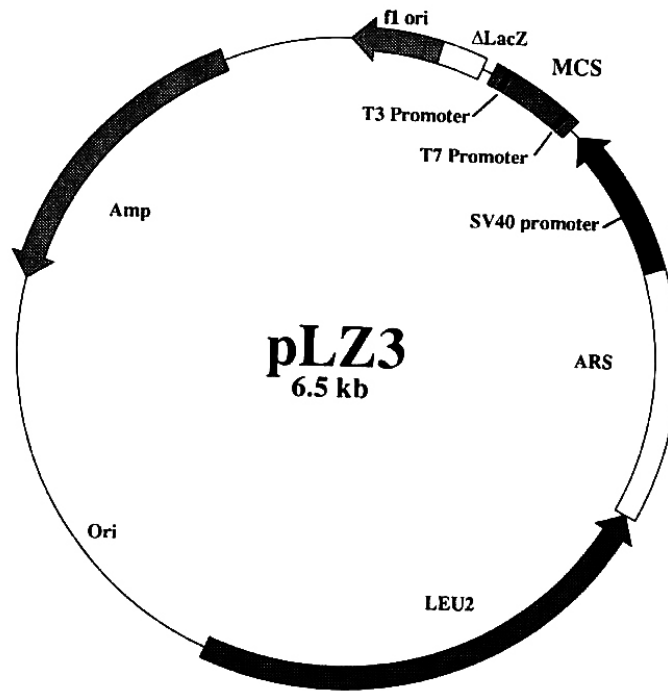
; MCS(pLZ3)

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                        CpoI(3)     SauI(b) MluI(5)                    AatII(3) BglII(5)  AscI(5)          BalI(b)
          PstI(3)SacI(3)     ApaI(3)     ------                       ------ ------   --------      ------
          SseI(3)------      ------------      T7  Promoter  EcoRI(5)  XbaI(5)AflII(5)      BstXI(5)
          --------  -------   -------   -----------------  ------   ------ ------   ------------ --
NNNCTGCA  CCTGCAGGAGCTCGGACCGGGCCCTTAGGACGCGTAATACGACTCACTATAGGGAATTCGACGTCTAGATCTTAAGGCGCGCCAAGGGGTTGGCCA
NNNG  ACGTGGACGTCCTCGAGCCTGGCCCGGGAATCCTGCGCATTATGCTGAGTGATATCCCTTAAGCTGCAGATCTAGAATTCCGCGCGGTTCCCCAACCGGT
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          BstEII(5)
          -------         NheI(5)                          SwaI(3)       NruI(b)      SacII(3)
SnaBI(b)    DraIII(3) ------    SceI(3)         NotI(5)  T3 promoter --------SplI(5)------ PacI(3)------  SacI(3)
------    -----------   ----------------    -----------------        ------   --------      ------
          CGTGGTAACCACGGGGTGGCTAGCTAGGGATAACAGGGTAATATAGCGGCCGCCCTTTAGTGAGGGTTAATTTAAATCGTACGTCGCGATTAATTAACCGCGGTGGAGCT  CAAT
          GCACCATTGGTGCCCCACCGATCGATCCCTATTGTCCCATTATATCGCCGGCGGGAAATCACTCCCAATTAAATTTAGCATGCAGCGCTAATTAATTGGCGCCACC  TCGACTTA
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          TCGCCCTATAGTGAGTCGTATTA -3'
          AGCGGGATATCACTCAGCATAAT -5'
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Fig. Structure of pLZ3 and the restriction sites.

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