

cDNA Library, *S. cerevisiae* , Log Phase

02-701 500 ng

This cDNA library (plasmid DNA) is constructed from *Saccharomyces cerevisiae*, strain S288C-derived poly(A)⁺ RNA at the log phase by the Linker-Primer method (Ref.1) by Prof. H. Nojima of Osaka University. This library is unidirectionally cloned by using the oligo (dT)₁₈ linker primer which contains the restriction enzyme site of *Not* I, and *Bam*HI (*Bgl*II)-*Sma* I adaptor.

The pLZ3 vector (shown below) used in this library can not replicate in *S. cerevisiae* but contains pUCori for replication in *E. coli*

Application

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.)

Specification

Quantity: 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: -20°C

References

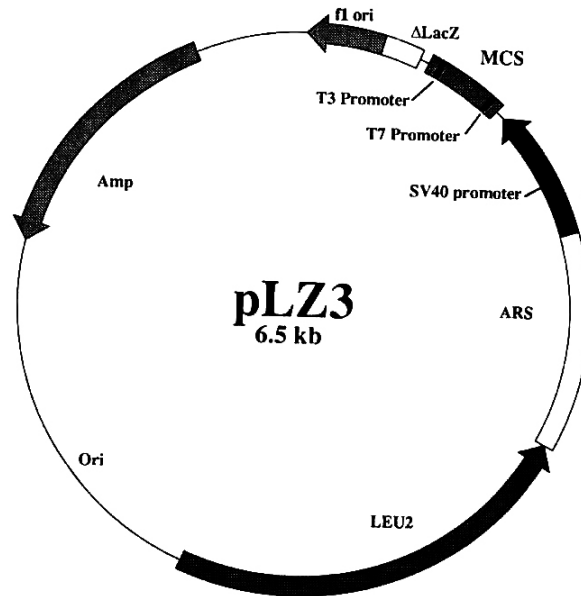
1. Kobori,M., Ikeda,Y., Nara,H., Kato,M., Kumegawa,M., Nojima,H., and Kawashima,H. " Large scale isolation of osteoclast-specific genes by an improved method involving the preparation of a subtracted cDNA library." *Genes Cells* **3**: 459-475 (1998) PMID: [9753427](#)
2. Tanaka,S. and Nojima,H. "Nik1: 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. Sambrook,J. and Russell,DW. *Molecular Cloning* Chapter 11 "Preparation of cDNA libraries and gene identification." CSHL Press (2001)

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 (See [HP](#)).

Fig. Structure of pLZ3 and the restriction sites. **Ars** is the region required for replication in *S. pombe*, and **Ori** is a plasmid origin for replication in *E. coli*



; MCS(pLZ3)

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          CpoI(3)  SauI(b) HluI(5)                AatII(3) BglII(5) AscI(5)      BalI(b)
PstI(3) SacI(3)  ApaI(3)                EcoRI(5) XbaI(5) AflIII(5)  BstXI(5)
SseI(3)-----T7 Promoter-----
NNNCTGCA CCTGCAGGAGCTCGGACCGGGCCCTTAGGACGCGTAATACGACTCACTATAGGGAATTCGACGCTAGATCTTAAGGGCGCCAAGGGGTGGCCA
NNGG ACGTGGACGTCCTCGAGCCTGGCCGGGAATCCTGCGCATTATGCTGAGTGATATCCCTTAAGCTCAGATCTAGAATTCCGCGCGGTTCCCAACCGGT

          BstEII(5)
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SnaBI(b)  DraIII(3)  NheI(5)  SceI(3)  NotI(5)  T3 promoter  SmaI(3)  NruI(b)  SacII(3)
-----SplI(5)-----PacI(3)-----SacI(3)
CGTGGTAACCAACCGGGTGGCTAGCTAGGGATAACAGGGTAATATAGCGCCGCCCTTATGAGGGTTAATTTAAATCGTACGTCGCGATTAATTAACCGCGGTGGAGCT CAAT
GCACCATTTGGTCCCCACCGATCGATCCCTATTGTCCCATATATCGCCGGGGAAATCACTCCCAATTAATTTAGCATGCAGCGCTAATTAATTGGCGCCACC TCGACTTA

TCGCCCTATAGTGTAGTCCGTATTA -3'
AGCGGGATATCACTCAGCATAAT -5'

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