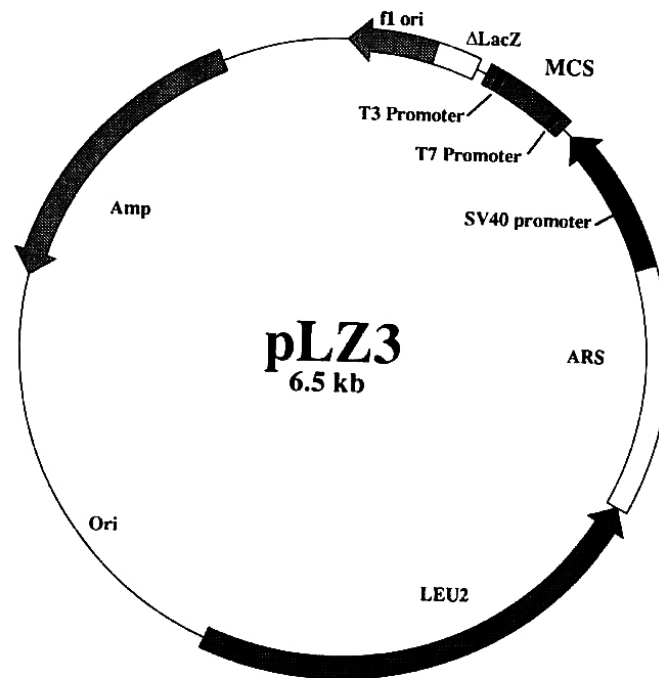


cDNA Library, *S. cerevisiae*, Log Phase

Product code	02-701
Size	500 ng
Storage	-20°C
Product Description	<p>This cDNA library (plasmid DNA) is constructed from <i>Saccharomyces cerevisiae</i>, 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 <i>Not</i> I, and <i>Bam</i>HI (<i>Bgl</i>II)-<i>Sma</i> I adaptor.</p> <p>The pLZ3 vector (shown below) used in this library can not replicate in <i>S. cerevisiae</i> but contains pUCori for replication in <i>E. coli</i></p>
Concentration	40 ng/μl
Buffer	10 mM Tris-HCl-1mM EDTA (pH 7.5)
Quality	<p>1. Number of independent clones: 3.6 x 10⁶</p> <p>2. Average insert size : longer than 1 kb</p>
Application	<p>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.</p> <p>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.)</p>
References	<p>Construction of this library is described in Supplementary data of Ref.3</p> <ol style="list-style-type: none"> 1. Kobori M <i>et al</i> "Large scale isolation of osteoclast-specific genes by an improved method involving the preparation of a subtracted cDNA library." <i>Genes Cells</i> 3: 459-475 (1998) PMID: 9753427 2. Tanaka S and Nojima H "Nik1: a Nim1-like protein kinase of <i>S. cerevisiae</i> interacts with the Cdc28 complex and regulates cell cycle progression." <i>Genes Cells</i> 1, 905-921 (1996) PMID: 9077450 3. Tougan T, Okuzaki D, <u>Nojima H</u>. Chum-RNA allows preparation of a high-quality cDNA library from a single-cell quantity of mRNA without PCR amplification. <i>Nucleic. Acids Res.</i>, 36(15):e92, (2008) PMID:18603591
Note	<p>* This library is to be used only by the purchaser. It is not allowed to amplify and transfer the library to a third person.</p> <p>* Related products: human tissue specific cDNA libraries and cDNA libraries of model organisms (See HP).</p>
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE HUMAN and IN DIAGNOSTIC PROCEDURES. NOT FOR MILITARY USE.	

Data Image : 02-701 cDNA Library, *S. cerevisiae*, Log Phase



; MCS(pLZ3)

CpoI(3) SauI(b) MluI(5) AatII(3) BglII(5) AscI(5) BalI(b)
 PstI(3) SacI(3) ApaI(3) T7 Promoter EcoRI(5) XbaI(5) AflIII(5) BstXI(5)
 SseI(3) -----
 NNNCTGCA CCTGCAGGAGCTCGGACCGGGCCCTTAGGACGCGTAATACGACTCACTATAGGGAATTCGACGCTAGATCTTAAGGCGGCCAAGGGGTTGGCCA
 NNNG ACGTGGACGCTCCTCGAGCTGGCCCGGGAATCCTGCGCATTATGCTGAGTGATATCCCTTAAGCTGCAGATCTAGAATTCCGCGCGSTTCCCAACCGGT

BstEII(5) NheI(5) NotI(5) T3 promoter SmaI(3) NruI(b) SacII(3)
 SnaBI(b) DraIII(3) SceI(3) NotI(5) T3 promoter SmaI(3) NruI(b) SacII(3)
 CGTGGTAACACGGGGTGGCTAGCTAGGGATAACAGGGTAATATAGCGCGCCCTTTAGTGAGGGTTAATTAAATCGTACGTCGCGATTAATTAACCGCGGTGGAGCT CAAT
 GCACCATTTGGTCCCCACCGATCGATCCCTATTGTCCTATTATATCGCGGCGGGAATCACTCCCAATTAAATTTAGCATGCAGCGCTAATTAATTGGCGCCACC TCGACTTA

TCGCCCTATAGTGAGTCGTATTA -3'
 AGCGGGATATCACTCAGCATAAT -5'

Fig. Structure of pLZ3 and the restriction sites.