

## cDNA Library, Human Umbilical Vein Endothelial Cell

Product code	02-721
Size	500 ng
Storage	-20°C
Product	This cDNA library (plasmid DNA) is constructed from Human Umbilical Vein Endothelial
Description	Cell (HUVEC)-derived poly(A)+ RNA by the Linker-Primer method (Ref.1) by Professor
	Hiroshi Nojima of Research Institute for Microbial Diseases, 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.
	The pAP3neo vector used in this library can express human genes in mammalian cells as
	it contains SV40 promoter. It also contains Ori of pUC plasmid required for replication in
	<i>E.coli</i> , f1 ori which is necessary for ssDNA synthesis, and bacteriophage T7 and T3 promoters
	for RNA synthesis (see Figure). GenBank Accession No. <u>AB003468</u>
Concentration	40 ng/μl
Buffer	10 mM Tris-HCl-1mM EDTA (pH 7.5)
Quality	1. Number of independent clones: $1.8 \times 10^6$
	2. Average insert size: longer than 1 kb
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. It is useful for large-scale protein productions, and preparation of
	probes, etc.
	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.)
References	1. Kobori M et al" 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: <u>9753427</u>
	2. Sambrook J and Russell DW <i>Molecular Cloning</i> 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 <u>HP</u> ).
Please note: All products are FOR RESEARCH USE ONLY. NOT FOR USE HUMAN and IN DIAGNOSTIC	
PROCEDURES. NOT FOR MILITARY USE.	



Data Image: 02-721 cDNA Library, Human Umbilical Vein Endothelial Cell

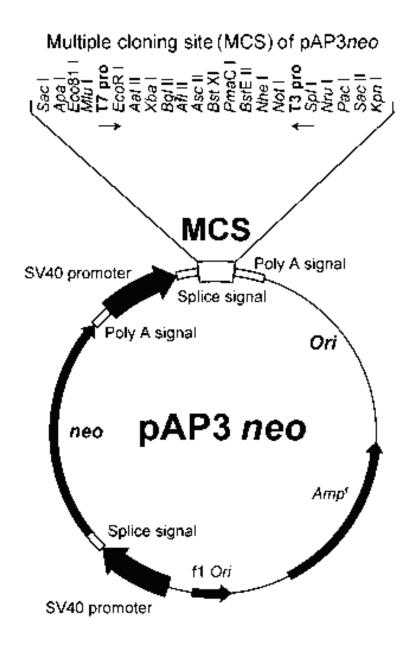


Fig. Structure of pAP3neo and the restriction sites