

New Platform of PCR Technology

Innovation of Gene Discovery



2006 Catalog

- GeneFishing™ DEG Premix Kit
- DNA Walking *SpeedUp*™ Premix Kit
- CapFishing™ Full-length cDNA Premix Kit
- Forever Premix Size Markers
- PCR-related Products
- DNA Size Markers

GeneFishing™ DEG Premix Kit

The GeneFishing™ DEG Premix Kit delivers differentially expressed genes (DEGs) to an agarose gel within 5 hours.

DEG refers to genes that are expressed differentially at the mRNA level in two or more nucleic acid samples. GeneFishing™ Technology dramatically improves the specificity of PCR amplification resulting in the detection of only targeted PCR products.



Within 5 hours, Differentially Expressed Genes (DEGs) can be delivered on an agarose gel.

News

Sigma-Aldrich and Seegene, Inc. entered into a licensing arrangement for Seegene's Annealing Control Primers (ACP) Technology.

Success stories

"Thank you for introducing this valuable kit. The results are complementary well to our microarray data. This kit is fast, easy to work with and, most importantly, it works. The special primers ensure the specificity of the result. We recommend this kit for general screening of differential gene expression between two or more samples."

Yi Cai, M.D., Texas A&M University System
Health Science Center

"The assay is fast and simple, yields direct results, is comprehensive (looks at all the genes expressed a cell), and the set of 6 kits makes it flexible. I highly recommend these kits to those researchers looking for an alternative to some of the more time and labor intensive screening methods available."

Patrick Eden, Amgen Inc.

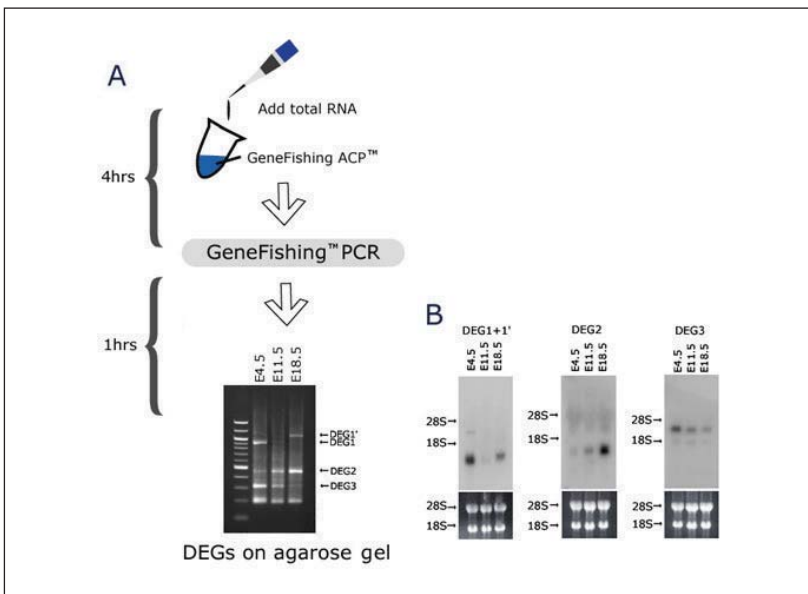


Fig. 1. Flow chart of differentially expressed genes (DEGS) discovery.
A. Identification of differentially expressed genes by the GeneFishing™ DEG Premix Kit. Total RNAs from mouse conceptuses at E4.5, E11.5 and E 18.5 were used as starting materials for the synthesis of the first-strand cDNAs.
B. Confirmation of the differential expression pattern by Northern blot analysis using DEG1, DEG2, or DEG3 as a probe.

Features

- No false positives : High sensitivity, Reproducibility, Specificity
- Agarose gel detection (No RI/fluorescent tags)
- Guaranteed reproducibility
- Extensive range of PCR products
- No specific skills required
- Discover unknown or novel genes as well as Known genes

Applications

Applicable to all eukaryotic organisms

Applicable to all differentially expressed genes

- Research into disease related genes
- Research into genes that respond to specific drug/hormone treatments
- Research into genes whose transcription changes with the biological process/environment
- Research into genes involved in development
- Research into genes involved in cell differentiation
- Research into genes involved in signal transduction
- Research into biomarkers



Success stories

“Even though this is my first experiment with differential display-PCR, I successfully detected several candidate genes with enhanced or suppressed transcription.”

Kyoung Sang Cho,
Baylor College of Medicine

“One of the obvious advantages of this technology is the ease of use and low cost, as compared to alternative comparative genomics techniques.”

Sergey Zozulya, Ph.D., Research Director,
VasGene Therapeutics

“I was happy about its simplicity since we could see the results on agarose gel very easily, which results in saving a great deal of time and labor work. Considering total cost and work in DEG discovery, I think it is very effective to use this kit comparing other DD related products.”

Jong-Chul Shin, M.D., College of Medicine,
Catholic University of Korea

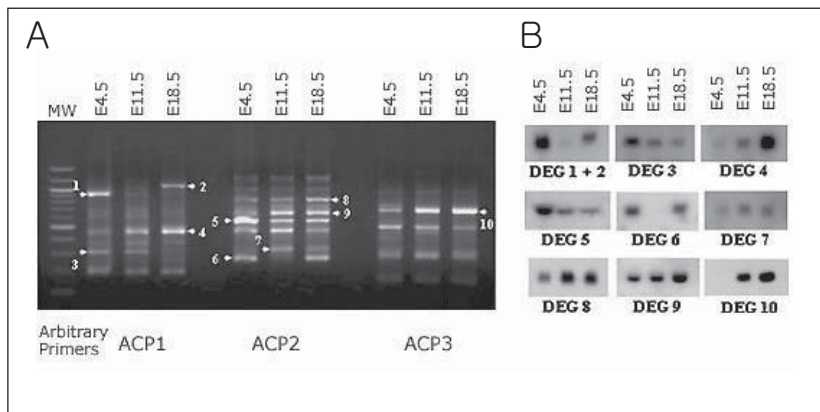


Fig. 2. Differentially expressed genes (DEGs) during mouse conceptus development displayed on an agarose gel.

A. The two-stage PCR was performed using 3 different arbitrary ACPs. Arrows indicate DEGs. MW, Forever 100 bp Ladder Premix Personalizer (Cat. No. M0100).

B. The 10 DEG clones were confirmed by Northern blot analysis.

Components

- dT-ACP1 (10uM) for Reverse transcription
- dT-ACP2 (10uM) for PCR
- 20 Arbitrary ACPs
- Control cDNAs (Kidney, 10ng/ μ l)
- Control cDNAs (Liver, 10ug/ μ l)
- Control ACP (5uM)
- 2X SeeAmp™ ACP™ Master Mix
- User Manual

GeneFishing™ Technology and its applications

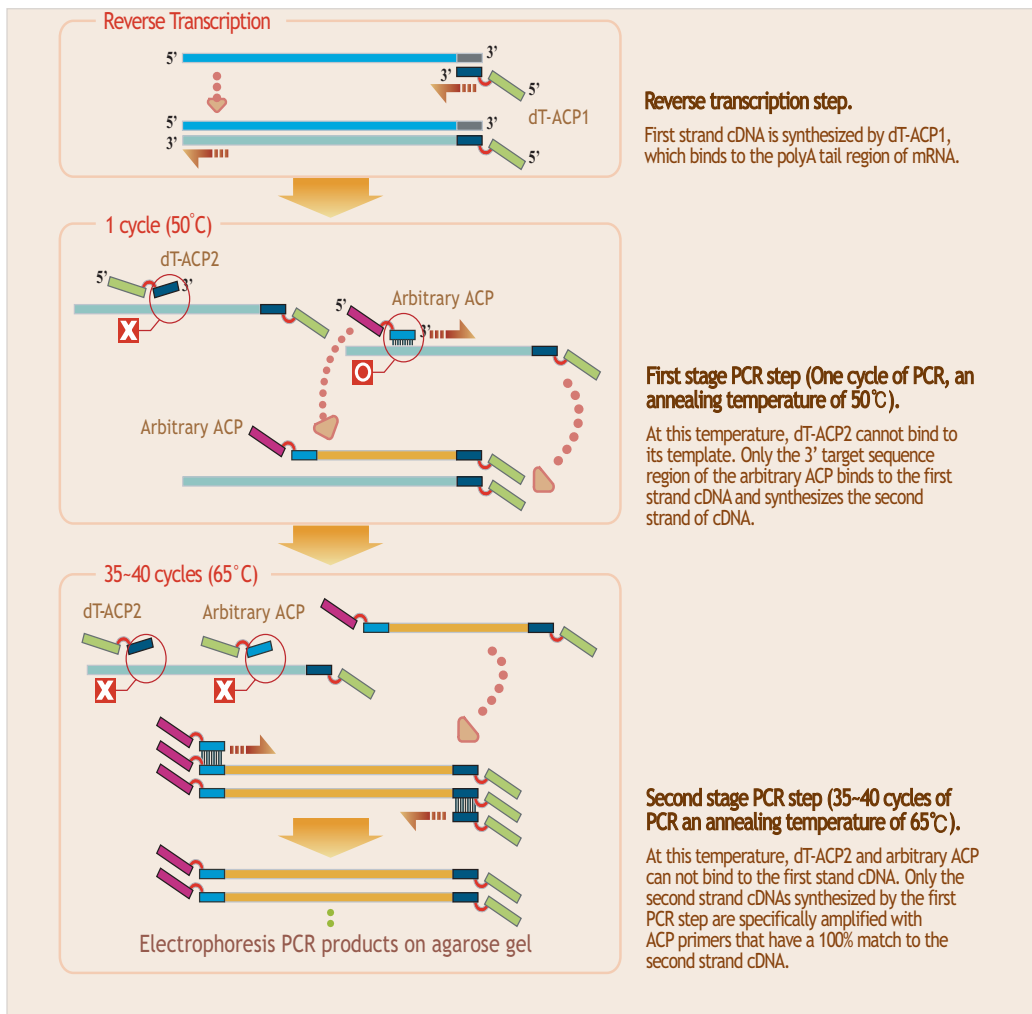


Fig. 3. Detailed flow chart of cDNA synthesis and GeneFishing™ PCR. First-stage PCR is conducted using an arbitrary ACP for only one cycle. This step eliminates the problems of the arbitrary/arbitrary products or dT-ACP/dT-ACP products. Second-stage PCR is commenced under high stringency condition ($T_{\text{anneal}} = 65^{\circ}\text{C}$). The second-strand cDNAs are amplified by priming the dT-ACP and arbitrary ACP at 3'-and 5'-ends, respectively.

Ordering Information

Products	Size	Cat. No.
GeneFishing™ DEG 101 & 102 Premix Kitx (package 1)	2 kits	K1021
GeneFishing™ DEG 103 & 104 Premix Kits (package 2)	2 kits	K1022
GeneFishing™ DEG 105 & 106 Premix Kits (package 3)	2 kits	K1023
GeneFishing™ DEG 107 & 108 Premix Kits (package 4)	2 kits	K1024
GeneFishing™ DEG 109 & 110 Premix Kits (package 5)	2 kits	K1025
GeneFishing™ DEG 111 & 112 Premix Kits (package 6)	2 kits	K1026
GeneFishing™ DEG 101 ~ 112 Premix Kits (full package)	12 kits	K1040

Related Products

Products	Size	Cat.No.
2X SeeAmp™ACP™ Master Mix	5 ml	E1010
1 kb DNA Ladder	200 loadings	M2020
Forever 100bp Ladder Premix Personalizer	12 clones	M0100
Forever multi Ladder Premix Personalizer	12 clones	M0150

Citations

The international Journal of Biochemistry & Cell Biology (2006) 38:183–195
 Journal of Surgical Research (2005) 127: 118–112
 Report Fertil Dev. (2005) 17: 625–631
 Molecular Reproduction and Development (2005) 70: 278–287
 Molecular Reproduction and Development (2005a) 70: 314–323
 Molecular Reproduction and Development (2005b) 71: 275–283
 Molecular Reproduction and Development (2005) 70: 390–396
 Fertility and Sterility (2005) 83: 1293–1296
 Journal of Environmental Toxicology (2005) 20: 67–73
 Korean Journal of Obstetrics and Gynecology (2005) 48: 617–627
 FEMS Microbiology Letters (2004) 238: 151–158
 Korean Journal of Obstetrics and Gynecology (2004) 47: 10086–1092
 FEMS Letters (2004) 578: 21–25
 Infection and Immunity. (2004) 72: 4628–4638
 Pigment Cell Research (2004) 17: 659–667
 Biotechniques (2004) 36: 424–434
 Korean Journal of Gynecologic Oncology and colposcopy (2003) 14: 300–305
 Biotechniques (2003) 35: 1180–1184

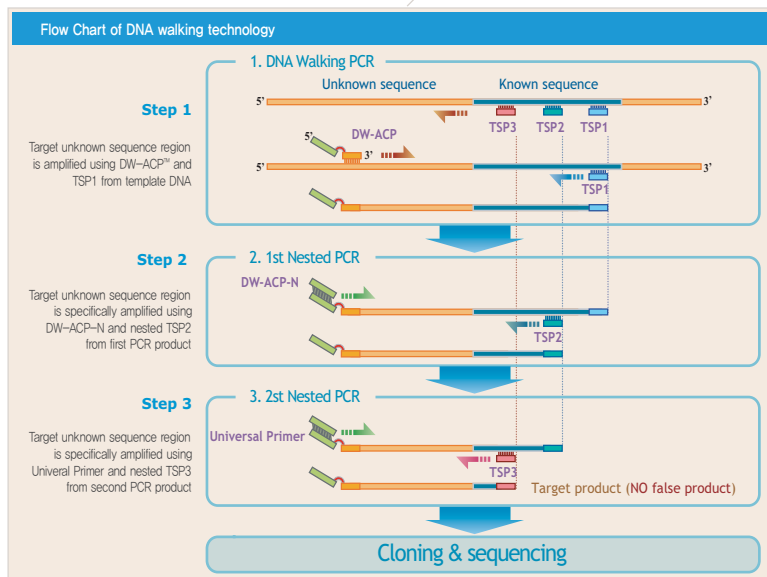
DNA Walking SpeedUp™ Premix Kit

A new, rapid PCR method for amplifying unknown target sequences!

Seegene's DNA Walking SpeedUp™ Premix Kit is composed of a PCR Master Mix and unique DNA Walking ACPs (DW-ACPs) that are designed to capture unknown target sites with high specificity. The optimized PCR conditions, referred to as DW ACP-PCR™ technology, allow unknown flanking regions of up to 2 kb in length to be obtained. This kit represents a powerful and revolutionary way to directly amplify unknown sequences in most cases.

Features

- **Simplest**
This method requires no library construction, no restriction enzyme digestion, no immobilization, and no complex PCR.
- **Fastest**
This method does not require complicated procedures and generates data rapidly.
- **The most reliable method available**
This method uses Seegene's original technology (ACP™), yielding only real products without false positives.



Flow chart of DNA Walking ACP-PCR™ Technology. TSP1, Target-Specific Primer 1; TSP2, First Nested Target-Specific Primer; TSP3, Second Nested Target-Specific Primer



Success stories

“I use your DNA Walking SpeedUp™ Kit to amplify cDNA insert from genomic DNA. It works very well. The major PCR bands were cut and sent for sequencing. The sequence results come back shown the most of PCR products were gene specific sequences.”

Xiaoqing He, A & G Pharmaceutical Inc.

“I have with great satisfaction tried the DNA Walking SpeedUp™ Kit, and I will definitely continue to use it. I have warmly recommended it to my colleagues both in Denmark, China and Japan. I am sure the kit will replace the use of the Vectorette kit in most of our applications now.”

Sara Landvik, Novozymes

“Great Kit! I found where my transgene was located but I had to digest with an enzyme that cut once in my vector since there are multiple copies in the same locus (before using the kit).”

Givsy Somma, Post Doc.,
Baylor College of Medicine

Applications

- Integration site identification
 - Determination of location or orientation of transgene/virus/transposon
 - Screening of deletion or insertion
- Unknown sequence identification
 - Full-length cDNA cloning or sequencing of EST
 - Cloning of promoter regions
 - Large clone sequencing
 - BAC/YAC clone sequencing
 - Splicing analysis
- Genome Walking
 - Cloning or sequencing of promoter regions
 - Gene structure (exon/intron junction)
 - Gap filing

Components

- DW-ACP1 for 1st PCR
- DW-ACP2 for 1st PCR
- DW-ACP3 for 1st PCR
- DW-ACP4 for 1st PCR
- DW-ACPN for 1st nested PCR
- Universal primer for 2nd nested PCR
- 2X SeeAmpTM ACPTM Master Mix II
- User Manual

Ordering Information

Product	Size	Cat. No.
DNA Walking <i>SpeedUp</i> TM Premix Kit	10 rxns	K1501
	25 rxns	K1502

Related Products

Products	Size	Cat. No.
2X SeeAmp TM ACP TM Master Mix II	1 ml	E1012
1 kb DNA Ladder	200 loading	M2020
Forever 100bp Ladder Premix Personalizer	12 clones	M0100
Forever Multi Ladder Premix Personalizer	12 clones	M0150

CapFishing™ Full-length cDNA Premix Kit

The fastest and the simplest method!
Full-length cDNA synthesis within 2 hours!

CapFishing™ Technology (patent pending), which employs the CapFishing™ adaptor and an oligo dT-adaptor, is an ideal way to exclusively generate full-length cDNAs. This is a simple and rapid technique that does not require the usual complex series of enzymatic reactions such as tailing, adaptor ligation, CIP pre-treatment, or second strand cDNA synthesis. Only full-length cDNAs synthesized by the CapFishing™ Technology have the CapFishing™ adaptor at their 3'-ends and oligo dT-adaptor sequences at their 5'-ends. Consequently, these first-strand full-length cDNAs can be used directly in 5'- or 3'-RACE (Rapid Amplification of cDNA End) reactions to amplify full-length 5'- and 3'-cDNA ends.

Features

- **Accurate**
Only full-length cDNAs generated from first strand cDNA synthesis have the CapFishing™ adaptor.
- **User friendly**
No complex enzymatic reactions or preliminary steps, such as adaptor ligation, phenol extraction, or second-strand cDNA synthesis are required.
- **Speedy**
Full-length cDNAs are generated by reverse transcription only within 2 hrs.
- **Useful**
The full-length 5'- and 3'-cDNA ends generated by CapFishing™ Technology during first-strand full-length cDNA synthesis can be used for full-length 5'- and 3'-RACE



Features

- RT Reaction Only
- Simple and Rapid Method
- High Accuracy
- No Enzymatic Reactions
- No Library Screening Step
- Promising 5'-/3'-RACE
- For Any Target cDNA

I gotta see gene!

CapFishing™ Full-length cDNA Premix Kit

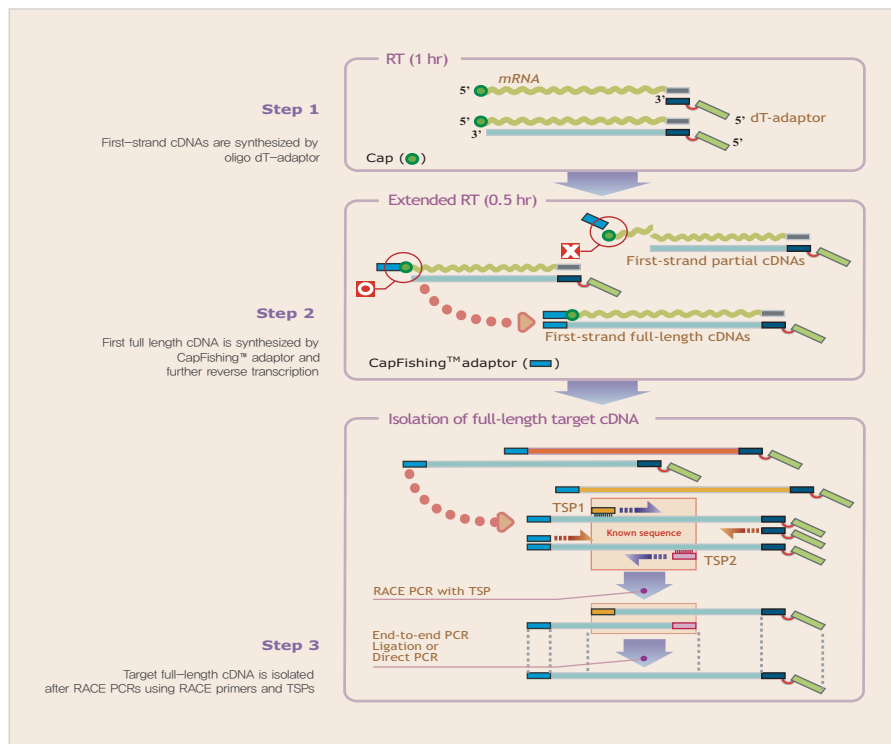


Fig. 1. Flow chart of full-length cDNA synthesis.

Applications

- Functional study of specific genes
- Screening of alternatively spliced variants of specific genes
- Study of genetic mutations in specific genes
- Analysis of the expression levels of tissue-specific genes
- Tissue-specific RNA polymorphism
- Follow-up studies after using GeneFishing™ DEG Premix Kit

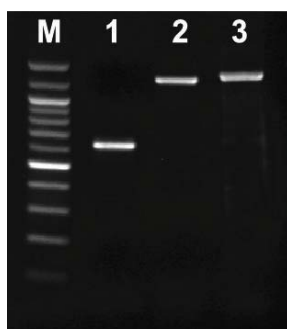


Fig. 2. Generating the full-length cDNA of mGAPDH gene. The first-strand cDNAs were synthesized using total RNA isolated from mouse kidney tissues. RACE PCR was performed using 5'- or 3'-RACE primers with control 5'- or 3'-GAPDH primers. M, Forever 100 bp Ladder Premix Personalizer; Lane 1, 5'-RACE reaction (0.6 kb); Lane 2, 3'-RACE reaction (1.2 kb); Lane 3, Full-length cDNA (1.3 kb).

Components

CapFishing™ adaptor (patent pending)
 CapFishing™ solution
 BSA (1 mg/ml)
 Oligo dT-adaptor (10 uM)
 Random Hexamer
 5'-RACE Primer (10 uM)
 3'-RACE Primer (10 uM)
 Control 5'-GAPDH Primer (5 uM)
 Control 3'-GAPDH Primer (5 uM)
 Control Total RNA (Mouse Kidney, 7.5 ug)
 dNTP (5 mM)
 DEPC-treated Water
 SeeAmp™ Taq Plus Master Mix

Ordering Information

Product	Size	Cat. No.
CapFishing™ Full-length cDNA Premix Kit	RT : 7 rxns PCR : 100 rxns	K2000

Related Products

Products	Size	Cat. No.
2X SeeAmp™ Taq Plus Master Mix	1 ml	E1030
3'-RACE Primer (10 uM)	60 rxns	P1233
5'-RACE Primer (10 uM)	60 rxns	P1234
Control 3'-GAPDH primer (10uM)	100 rxns	P1231
Control 5'-GAPDH primer (10uM)	100 rxns	P1232
Forever 100 bp Ladder Premix Personalizer	12 clones	M0100
Forever Multi Ladder Premix Personalizer	12 clones	M0150
1 kb DNA Ladders	200 loadings	M2020

Forever Premix Size Markers



A new concept in DNA size markers!

Forever Premix Size Markers (patent pending) are designed to be used indefinitely after a one-time purchase and to enable researchers to make their own customized DNA ladders. Forever size markers are completely different from any existing commercial DNA ladders for its permanent usage and customized size marker.

S Success stories

“This ladder is great! So simple to use and high quality products. This is going to save our lab a lot of money. And we can customize the ladder to our preferences. Someone should have thought of this a long time ago. Thanks Seegene.”

D.J. Klocke, North Dakota State University

“I have amplified all genes in the set for the ladder, and am pleased with the results. I obtained clean, prominent bands for each. Congratulations on a successful product.”

Meg Flanagan, Ph.D.,
University of Southern California

“The Forever 100 bp ladder will save our laboratory a lot of money over the coming years. We also like how we can customise the ladder to suit our specific DNA ladder size requirements.”

S Kelly, Prince Henry's Institute

Features

- **Long term usage with a one-time purchase**

Sufficient plasmid templates and primers are supplied for years of usage in a typical laboratory. If needed, the plasmids can be transformed to yield an unlimited supply of templates.

- **Personalized DNA ladder**

The ladders can be customized according to your needs by selecting specific sizes of the template.

- **Ready-to-PCR format**

12 different plasmids are supplied in the ready-to-PCR format. 300~400 loadings are possible with the products of one PCR.

- **Applicable as control probes**

Each of the 12 different plasmid templates contains a copy of a well-known gene. These genes can be used as control probes in other experiments, such as DNA hybridization. In addition, the fragments can be radiolabeled with T4 DNA polymerase.

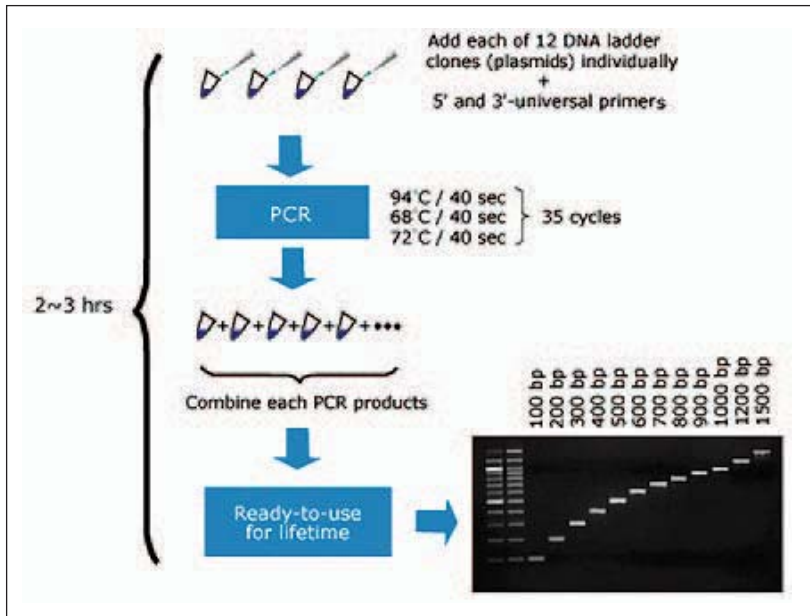


Fig. 1. The production flow chart of Forever Premix Size Marker.

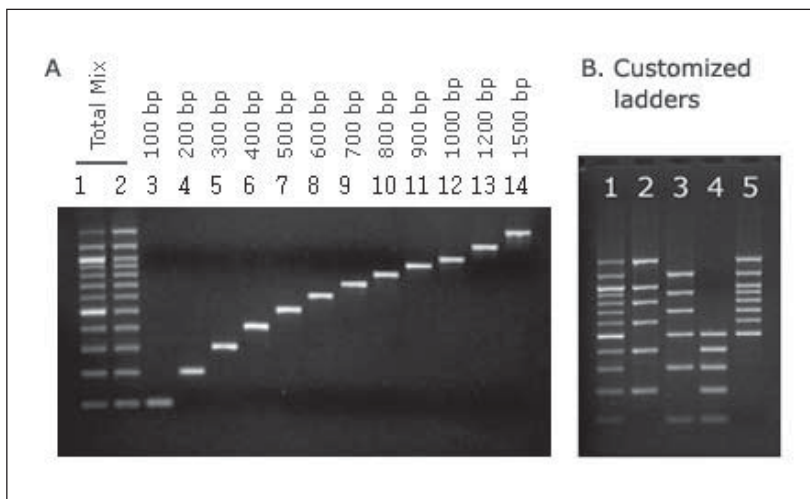


Fig. 2. Various types of customized DNA ladders generated using Forever 100 bp Ladder Premix Personalizer. A. 12 PCR products amplified using the 12 plasmid templates and a primer set. Lanes 1 and 2 show the results after mixing the 12 PCR products. B. Examples of customized DNA ladders that can be generated by using different combinations of the 12 different PCR products.

Seegene's Technology

Forever Premix Size Markers

Table 1. A list of corresponding genes for each band in Forever Premix Size Markers .

Size	Gene Information
100 bp	Nitric oxide synthase
200 bp	CD4
300 bp	p53 tumor suppressor
400 bp	Tumor necrosis factor
500 bp	GAPDH
600 bp	c-myc
700 bp	Interferon-alpha 1
800 bp	Beta 2-microglobulin
900 bp	SCI/MIP 1a
1000 bp	Interleukin-1 alpha
1200 bp	GM-CSF
1500 bp	c-fos

Ordering Information

Products	Size	Cat. No.
Forever 100 bp Ladder Premix Personalizer	12 clones	M0100
Forever Multi Ladder Premix Personalizer	12 clones	M0150

Related Products

Products	Size	Cat. No.
2X SeeAmp™ ACPT™ Master Mix	5 ml	E1010
Primer 1 (for Forever 100 bp & Multi Ladder)	150 rxns	P2001
Primer 2 (for Forever 100 bp & Multi Ladder)	150 rxns	P2002
Primer 3 (for Forever Multi Ladder)	150 rxns	P2003
Primer 4 (for Forever Multi Ladder)	150 rxns	P2004
1 kb DNA Ladder	200 loadings	M2020
Wide-Range DNA ladder	200 loadings	M2520

2X SeeAmp™ ACP™ Master Mixes

SeeAmp™ ACP™ Master Mixes are ready-to-use 2X Master Mixes specifically pre-optimized for Seegene's Kit users. The users only need to add dH₂O, template and primers into the Master Mixes and can reduce time. In addition, the Master Mixes eliminate artifacts and contamination arising from pipetting, which in turn increases the reproducibility of experimental data. 2x Master Mixes contain tracking dye and precipitant for agarose gel electrophoresis, eliminating the needs for a separate loading buffer.

Features

- High purity
- High reliability
- Simple reaction setup

Contents

Components	2X SeeAmp™ ACP™	2X SeeAmp™ ACP™
	Master Mix (50 μl rxn)	Master Mix II (50 μl rxn)
Taq Polymerase	2.5 U	2.5 U
dNTP Mixture	200 μM	250 μM
Reaction Buffer	1 X	1 X
MgCl ₂	2.5 mM	2.0 mM
Gel Tracking Dye	0.025%	1 X
Enzyme Stabilizer	Included	Included

Note : The values represent the final concentrations in 50 ul PCR volume.

Ordering Information

Products	Description	Size	Cat. No.
2X SeeAmp™ ACP™ Master Mix	Optimized for GeneFishing™ DEG Kits	5 ml	E1010
2X SeeAmp™ ACP™ Master Mix II	Optimized for general PCR & DNA Walking <i>SpeedUp™</i> Kit	1 ml	E1012

2X SeeAmp™ Taq Plus Master Mix

SeeAmp™ Taq Plus Master Mix is a pre-optimized, ready-to-use 2X Master Mix to which users can simply add dH₂O, template and primers only. The Taq Plus DNA Polymerase supplied in this product is a combination of two thermostable DNA polymerases and increases the fidelity and length of the amplified DNA fragment, while retaining the DNA polymerization power of *Taq* DNA polymerase

The amplified DNA fragments are a mixture of blunt-ended fragments and fragments with A overhang at 3' ends. 2X Master Mixes contain tracking dye and precipitant for agarose gel electrophoresis, eliminating the needs for a separate loading buffer.

2X SeeAmp™ ACP™ Master Mix I optimized for CapFishing™ Full-length cDNA Premix Kit.

Features

- Strong 5' → 3' DNA polymerase activity
- High extension rate
- High fidelity
- Long amplification length (up to 10 kb)

Contents

Components	Final conc. for 50µM PCR vol.
DNA Polymerase	2.5 U
dNTP Mixture	250 µM
Reaction Buffer	1 X
MgCl ₂	2.0 mM
Gel Tracking Dye	0.025%
Enzyme stabilizer	Included

Ordering Information

Product	Size	Cat. No.
2X SeeAmp™ Taq Plus Master Mix	1 ml	E1030

SeeAmp™ Long Taq DNA Polymerase

SeeAmp™ Long Taq DNA Polymerase is a blend of two thermal DNA polymerases ideal for increasing the fidelity and amplification length of DNA fragments without compromising the DNA polymerization power of *Taq* DNA Polymerase. 10X Long Taq PCR Buffer contains 20 mM MgCl₂. The buffer is optimized for use with 0.2 mM of each dNTP.

Features

- Long range PCR (up to 10 kb)
- High extension rate
- High fidelity
- High efficiency

Contents

SeeAmp™ Long Taq DNA Polymerase (5 units/μl)
10X Long Taq PCR Buffer

Storage buffer

20 mM Tris-HCl (pH 8.0), 100 mM KCl, 1 mM DTT, 0.1 mM EDTA,
0.5% Tween 20(v/v), 0.5% NP-40(v/v) , 50% Glycerol(v/v)

Ordering Information

Product	Size	Cat. No.
SeeAmp™ Long Taq DNA Polymerase	250 U	E3010

Related Product

Product	Size	Cat. No.
dNTP Premix	0.5 ml	N5210

SeeAmp™ Pfu DNA Polymerase

Pfu DNA polymerase isolated from *Pyrococcus furiosus* is a proofreading DNA polymerase with 3' → 5' exonuclease activity that exhibits the lowest error rate for any known thermostable DNA polymerase studied to date. *Pfu* DNA polymerase is highly thermostable, retaining 94-99% of its polymerase activity after 1 hour incubation at 95°C. With *Pfu* DNA polymerase, a denaturation temperature of up to 98°C can be used to amplify GC-rich regions. 10X Pfu PCR Buffer contains 20 mM MgSO₄. The buffer is optimized for use with 0.2 mM of each dNTP.

Features

- High fidelity
- High purity
- High amplification yield

Contents

SeeAmp™ Pfu DNA Polymerase (2.5 units/μl)
10X Pfu PCR Buffer

Storage buffer

50 mM Tris-HCl (pH 8.2), 1 mM DTT, 0.2 mM EDTA, 0.1% Tween 20(v/v),
0.1% NP-40(v/v), 50% Glycerol(v/v)

Ordering Information

Product	Size	Cat. No.
SeeAmp™ Pfu DNA Polymerase	250 U	E3210

Related Product

Product	Size	Cat. No.
dNTP Premix	0.5 ml	N5210

dNTP Premix

This package contains a mixture of 0.5 ml of the four deoxyribonucleotide solutions (dATP, dCTP, dGTP and dTTP). The nucleotides are supplied in sterile, doubly distilled water. The final concentrations of each deoxyribonucleotide are as follows:

10 mM dATP	(2'-deoxyadenosine 3'-triphosphate, sodium salt) C ₁₀ H ₁₂ N ₅ O ₁₂ P ₃ Na ₄ F.W. 579.2
10 mM dCTP	(2'-deoxycytidine 5'-triphosphate, sodium salt) C ₉ H ₁₂ N ₃ O ₁₃ P ₃ Na ₄ F.W. 555.1
10 mM dGTP	(2'-deoxyguanosine 5'-triphosphate, sodium salt) C ₁₀ H ₁₂ N ₅ O ₁₃ P ₃ Na ₄ F.W. 595.1
10 mM dTTP	(2'-deoxythymidine 5'-triphosphate, sodium salt) C ₁₀ H ₁₃ N ₂ O ₁₄ P ₃ Na ₄ F.W. 570.1

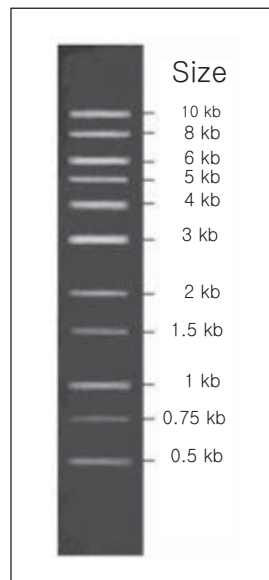
Ordering Information

Product	Size	Cat. No.
dNTP Premix	0.5 ml	N5210

1 kb DNA Ladder

Seegene's 1 kb DNA Ladder comprises 11 DNA fragments ranging in size from 0.5-10 kb. The 1 kb DNA Ladder provides the most complete and convenient DNA size marker in 1 kb DNA ladder/marker family. It is supplied in ready-to-use format (in 1X loading buffer). Each loading will yield a minimum of 30 ng DNA per band. The intensity of certain bands, such as the 3 kb band, has been deliberately increased to indicate the orientation within the band pattern.

Recommended Loading	6 μ l
Storage Buffer (1X loading buffer)	10 mM Tris-HCl, 1 mM EDTA (pH 8.0) 0.02% bromophenol blue 0.02% xylene cyanol 5% glycerol
Concentration	500ng/6 μ l



1 kb ladder on a 0.8% agarose gel

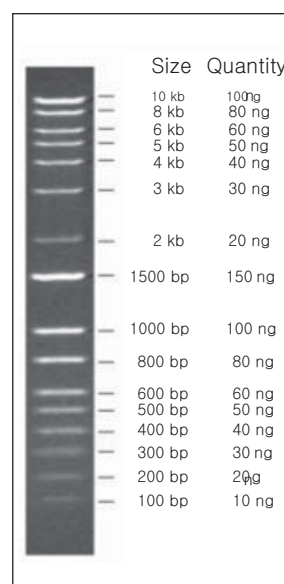
Ordering Information

Product	Size	Cat. No.
1 kb DNA Ladder	200 loadings	M2020

Wide-Range DNA Ladder

The Wide-Range DNA Ladder contains 16 DNA fragments ranging in size from 100 bp to 10 kb. The Wide-Range DNA Ladder contains a defined amount of DNA that specifically correlates with its size. Thus, both the size and the quantity of a particular DNA fragment can be determined at a glance. The ladder is particularly useful for the estimation of DNA concentration in such applications as probe labeling, DNA sequencing, optimizing insert/vector ratio in ligation reactions, and many other applications in which the DNA concentration is an important consideration. The Wide-Range DNA Ladder is supplied in ready-to-use format (in 1X loading buffer). The recommended loading for each lane will yield a unique pattern and the amount of DNA as indicated.

Recommended Loading 6 μ l
 Storage Buffer 10 mM Tris-HCl,
 (1X loading buffer) 1 mM EDTA (pH 8.0)
 0.02% bromophenol blue
 0.02% xylene cyanol
 5% glycerol
 Concentration 920 ng/6 μ l



Wide-Range DNA Ladder on a 0.9% agarose gel

Ordering Information

Product	Size	Cat. No.
Wide-Range DNA Ladder	200 loadings	M2520