

In Collaboration HiMedia & Ahram Biosystem, Inc. presents

Palm PCR™ - LA998

Redefining Speed and Portability



HiMediaLaboratories™
www.himedialabs.com

HIMEDIA®
For Life is Precious™

Palm PCR™

LA998

Portable Ultra-Fast PCR System

- Fully Portable
- Stand Alone
- Ultra-Fast & Highly Efficient
- Simple & Convenient

First Personalized PCR Machine!



- Available in three authentic colors:
- Red: LA998-R
 - Blue: LA998-B
 - Yellow: LA998-Y

Salient Features

- Battery-powered, stand-alone device:
More than 4 hours of operation on a single charge
- Extreme high efficiency:
Sensitivity below 10 copies
- Extended dynamic range:
Upto 2 kb with the high-speed and high-efficiency
- Ultra-fast amplification

Easy Reaction Set-up

Simple and Convenient : Simply set **Speed**, **Annealing temperature**, **PCR time**, **Preheat**



Speed and Dynamic Range

- ◆ Dynamic range of the amplification depends on the PCR speed level.
- ◆ Seven PCR speed levels available are categorized into the following three modes:
Standard Fast mode : F1, F2 and F3
Standard Slow mode : S1 and S2
Turbo Fast mode : T1 and T2

Palm PCR Selection Chart

MODE	Turbo		Standard Fast			Standard Slow	
	T1	T2	F1	F2	F3	S1	S2
TIME (minutes)	14-28	12-24	20-34	18-27	20-34	27-39	
AMPLICON SIZE (base pair)	≤500	≤450	900	800	600-700	1000-2000	
MANUAL OPTIMIZATION REQUIRED	for PCR reactions below 18 minutes		for PCR reactions below 24 minutes			-	

Amplification of *Salmonella* spp. with internal control in T2 mode
(Template DNA Conc. - 5 ng)

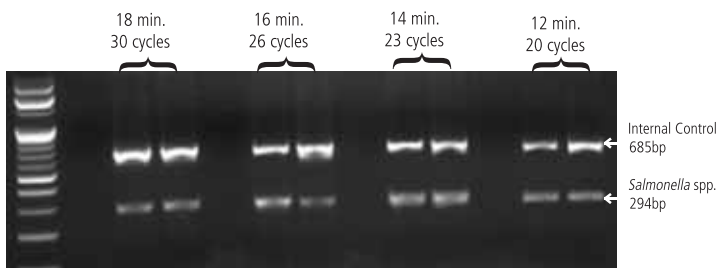


Fig. 1

Ultra Fast Amplification of *Salmonella* spp. uniplex PCR in 8 min.

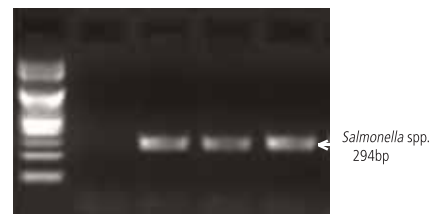
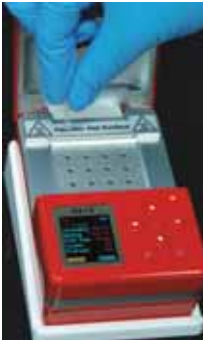


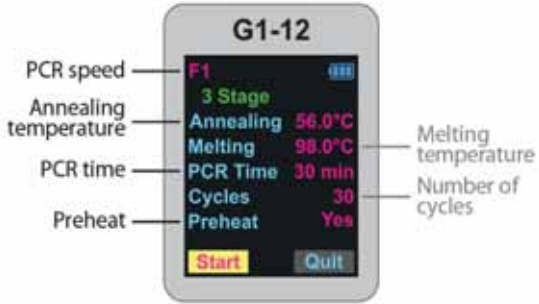
Fig. 2

Palm PCR™ Simple and Convenient User Interface

T2 mode operation



Protocol Display

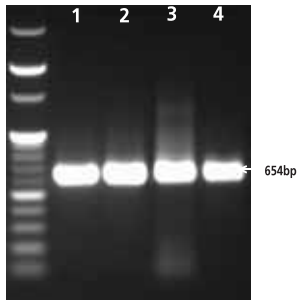


Palm PCR™ Application in Industry :

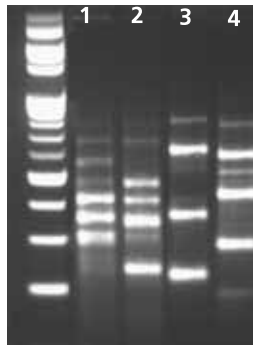
- ◆ Food detection
- ◆ Pharmaceuticals
- ◆ Research
- ◆ Clinical Diagnostics
- ◆ Forensic
- ◆ Environment
- ◆ Beverage
- ◆ Dairy
- ◆ Agriculture

Palm PCR™ Application Examples

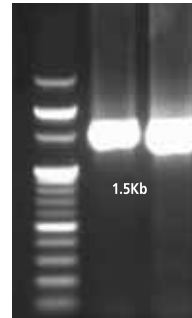
Research Application



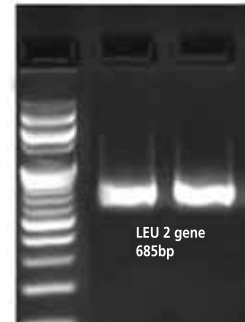
1. Mint leaf 2. Brinjal leaf
3. Rice seed 4. Chili seed
Amplification of rbL gene from plant
PCR time - 18 min.



1. *E. coli* 0103:K:H8 2. *E. coli* K12
3. *Bacillus cereus* 4. *Bacillus subtilis*
PCR time : 30 min.



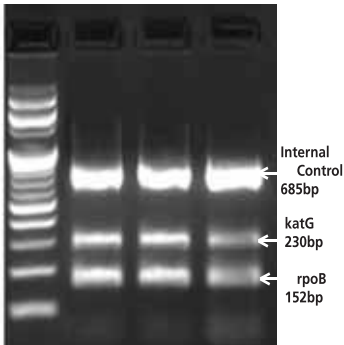
Bacterial 16s gene amplification
PCR time - 34 min.



Amplification of LEU 2 gene
from plasmid YEp13
PCR time - 18 min.

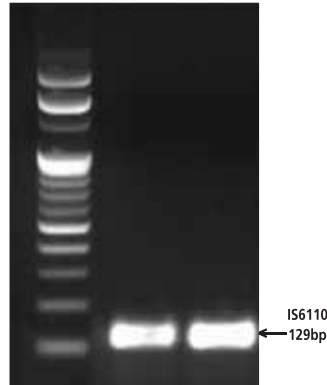
Clinical Diagnosis

MDR-TB detection



Sputum Sample
PCR time - 18 min.

M. tuberculosis detection

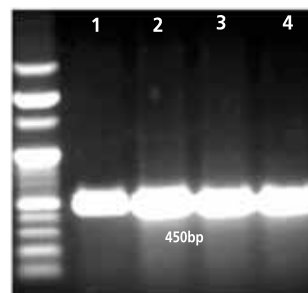


M. tuberculosis gene IS6110 amplification
PCR time - 10 min.

Pathogen Detection

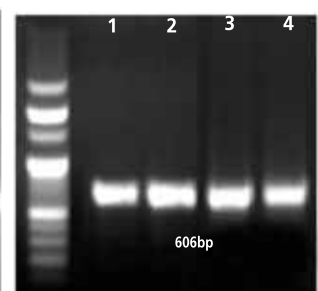
Food Pathogen

E. coli O157:H7 detection



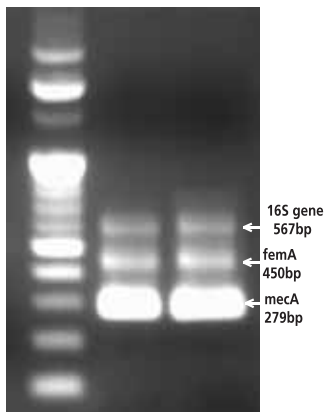
1. Egg, 2. Butter, 3. Baby food,
4. Commercial juice
PCR time - 19 min.

Salmonella spp. detection



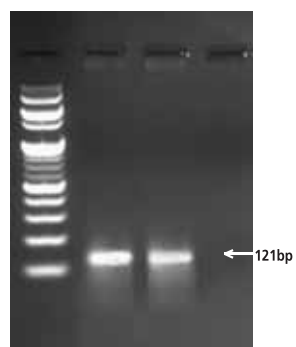
1, 2 - Milk powder
3, 4 - Chicken stock
PCR time - 24 min.

MRSA detection



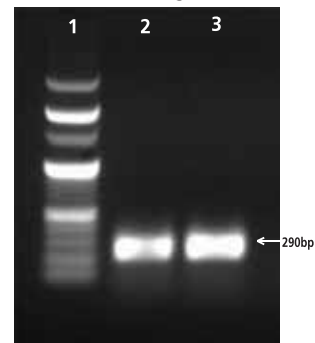
Methicillin Resistant *Staphylococcus aureus*
(MRSA) Detection Multiplex PCR
PCR time - 18 min.

Malaria detection



Malaria diagnosis showing *P. vivax*
amplicon 121bp from patient sample
PCR time : 18 min.

Plant Pathogen



A. niger amplification
PCR time - 18 min.

Specifications

LA998 Device	Size (w x d x h): 71 mm x 121 mm x 47 mm, Weight: 220 g (350 g including battery) Display: 1.3 inch color TFT LCD Input power: DC 11.1-15 V, 4 A Power consumption : ≤ 5 W (continuous operation) and ≤ 6.5 W (single operation) at 25°C PCR speed: 8 to 34 minutes / 30 cycles, seven speed levels Dynamic range : up to 2 kb Temperature : Well-to-well uniformity $\leq 0.1^\circ\text{C}$, Stability $\leq 0.1^\circ\text{C}$, Accuracy $\leq 0.2^\circ\text{C}$ Number of wells : 12, Sample volume : 20 μL
Accessories	Wedge Base, Model WB-1012A, Li+ Polymer Battery, Model LP-1920A AC/DC Adapter, Model AD-1540A or KPL-060H
Electrical	Battery (charging): DC 15 V ---- , 4.0 A
Requirements	AC/DC Adapter: AC 100-240 V ~ , 50-60 Hz, 1.5 A

Palm PCR Kits and Accessories

Product Name	Product Code	Packing
Palm PCR Kit	MBPCR031	25R* 50R*
Palm E.coli 0157:H7 Detection Kit	MBPCR032	25R* 50R*
Palm Salmonella Detection Kit	MBPCR033	25R* 50R*
Palm Mycobacterium tuberculosis Detection Kit	MBPCR034	25R* 50R*
Palm Malaria Detection Kit	MBPCR035	25R* 50R*
Palm Listeria monocytogene Detection Kit	MBPCR036	25R* 50R*
Palm Multi Drug Resistant Mycobacterium tuberculosis (MDR-TB) Detection Kit	MBPCR037	25R* 50R*
Palm PCR Sample Tube Rack (Holding Capacity : 6 X 8 Places)	PW1299	1 NO
Palm PCR Centrifuge Adaptor (Adaptor for holding Palm PCR tube during centrifugation).	PW1280	1 PK

*Reaction

Instrument Business Outlook (IBO) 2012 Silver Design Award for portable analytical instrumentation.



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Machine Weight Amplification Time
350gm Only **8-30 Minutes**

Machine Weight Amplification Time
8-9Kg **2-5 Hours**

Machine Weight Amplification Time
20-30Kg **5-8 Hours**

Machine Weight Amplification Time
~50Kg **8-10 Hours**



• • • expect only Quality from us™



For more information read QR code

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