

Staphylococcus aureus

PCR API

(3) (2) (1)

2010 2009 2008

100 *Staph. aureus*

Staph. aureus

. PCR API *Staph*

.PCR API system :

Isolation of *Staphylococcus aureus* Bacteria From Ice Cream and Its Identification According To The API and PCR Techniques

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ABSTRACT

This study was conducted in the years 2008-2009-2010, it has analyzed for *Staph. aureus* and isolated from 100 samples of traditional ice cream sold to customers it has had collected from different regions parts of Damascus and his countryside. The study has been found that there was no violation of the Syrian standard for *Staph. aureus*. And the results were also diagnosed using the techniques of *API Staph* and PCR equal.

Key Words: Ice cream, *Staph. aureus*, API system, PCR.

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(1995) 3000

.(Marshall and Arbuckle ,2000)

(
.(Anderson, 1992)

Tamsut (...)
.(Anderson,1992) 1989 Garcia
%56.6

% 68

Staph. %46.6 *Staph. aureus*
.(Wouafo *et al.*, 1996) *aureus*

% 81.7

.(Kruy, 2001) *Staph. aureus* %12.2
Staph. aureus

.(Kuroda, 2001) %33 %G+C
Staph. aureus

Coagulase

Goh)

(*et al.*, 1992
Staph.aureus

(Ahmadi *et al.*, 2010)

Staph.aureus

Coagulase

(Wieser and Busse, 2000) Staphylococci

Staphylococcus

Coagulase

Staph. aureus

PCR

(Weinstein *et al.*, 1998)

2007/2179

(1)

(1)

/					
³ 10	² 10	2	5		

:()

⋮
⋮
⋮
⋮

. ()

. () ()

Staph.aureus

()

PCR API *Staph*

(Polymerase Chain Reaction) PCR -
 16sRNA (fragment)
 (2F,2R) primer *Staph .aureus* 23s RNA
 (2)
 (Base Pairs (bp))
 .(NTI Vector)

(2)

bp		
200	5'- TTAACGGAATTTCCCGATCC -3'	2F
	5'- CCCAAAGGAATTTTCATCCAT -3'	2R

Baird Parker 24 *Staph. aureus*
 μl 100
 TRI μl 200 (Bhanderi *et al.*, 2009) DNA
 μl 400 15
 5 Phenol Chloroforme
 - - / 14000
 μl 40
 14000 %100 1
 %70 4 /
 μl 20 5
 . 20 - (DNA) TE
 μl 2 μl 25 PCR
 (Reaction Buffer 10X) 2.5 μl DNA
 - Eurobio μl 0.5 (nM 50) MgCl₂ μl 3
 (μl / p.mol 1) (dNTP)
 μl 1 (1) μl 1
 (DNA polymerase)
 PCR PCR
 30 - PCR system 9700 - GENE Amp.
 45 94 (Denaturation)
 72 (Extension) 45 60 (Annealing)
 10 92 45

10 72
4 (Final extension)
%1.5 (Agarose gel)
- Eurobio (TE) Tris – EDTA
- Eurobio (DNA Marker)
) -BIO RAD (electrophoresis)
150 85 (
- UVITEC gel Doc

100
)
(
Staph. aureus (3)

Staph. aureus (3)
36
.%36 *Staph. aureus*
11
) *Staph. aureus*
²10 " "
Staph. aureus /
% 11 (
(Gogov *et al.*, 1984) 7.78
Staph.
18– 7 *aureus*

Kruy,)

.(Marshall and Arbuckle ,2000) (2001

Staph.aureus (3)

Staph..aureus			
² 10×1.3	2008		1
10×1	2008		2
10×7	2008		3
10×4	2008		4
10×2	2008		5
10×6	2008		6
² 10×1.3	2008	+	7
² 10×1	2008	+	8
10×2.1	2008	+	9
10×1.7	2008	+	10
² 10×1	2008	+	11
10×1	2008		12
10×1	2008		13
10×2	2008		14
10×8	2008		15
10×1	2008		16
10×2	2008		17
10×1.2	2008		18
10×1.8	2009		19
² 10×2	2009		20
10×1.1	2009	+	21
10×1.8	2009	+	22
10×1	2009	+	23
² 10×2	2009	+	24
² 10×1.5	2009	+	25
² 10×1.5	2010		26
10×1.8	2010		27
10×2	2010		28
² 10×6	2010		29
10×1.2	2010		30
10×1.3	2010		31
² 10×2.1	2010	+	32
10×5	2010	+	33
³ 10×1	2010	+	34
10×3	2010		35
10×2	2010		36

API Staph

.Staph. aureus Baird Parker

SPSS

.%1
(2010 2009 2008)

.Staph. aureus

Staph. aureus

Staph. aureus

Staph. aureus

2R 2F

:PCR

Baird Parker

36

Staph. aureus

.API Staph

bp200

Staph. aureus

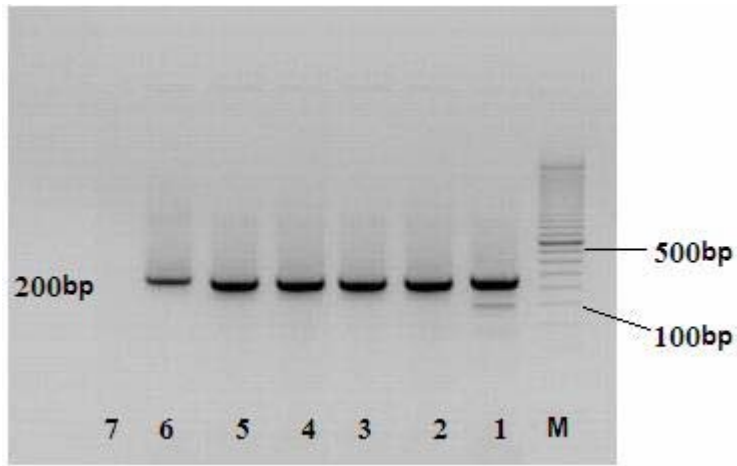
bp200

(1)

-

.M

(100bp Ladder)



Staph. aureus 6 2 (1)
 :7 () :1
 . :M ()

PCR API Staph

Staph. aureus
 .%100

Staph.

- 1

.%11 aureus

Staph. aureus

PCR

- 2

API Staph

Staph. aureus

- 3

PCR

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.34 -12
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