



()

PCR

*

**

PCR

: _____

: _____

PCR

SrRNA

IgM

PCR

(/)

(/)

: _____

IgM

PCR

()

PCR

: _____

SrRNA

PCR

: _____

// :

// :

*

IgM (zoonotic)
PCR
DNA
DNA-DNA
PCR
SrRNA
PCR (real-time) (Taqman)
IgM
(MAT)

² Polimerase Chain Reaction

¹ Microscopic Agglutination Test

/

/

()

B

PCR

SrRNA

.()

SrRNA

SrRNA

PCR

/ ± /

PCR

DNA

PCR

DNA

DNA

()

³ DNA Gyrase subunit B encoding gene

: ()
 PH / EDTA] L6-lysis buffer
 TritonX- (fluka) GUSCN
 () [(merck)
 Tris-Hcl GUSCN) L2-wash buffer
 PCR Techne-TC (/ PH /
 PCR mixture () k
 (Genekam) DNA DNA DNA PCR
 PCR
 PCR TBE DNA
 bp DNA (Genekam)
 PCR PCR
) DNA (Oligo5)
 PCR (SrRNA
 bp
 DNA :
 L16SF:5'-CACCAAGGCGACGATCGGTAGC-3'
 L16SR:5'-CAAGTCGCCTTCGCCACTGGTG-3'
 PCR / PCR
 DNA Taq DNA
 dNTP MgCl
 DNA PCRbuffer10X

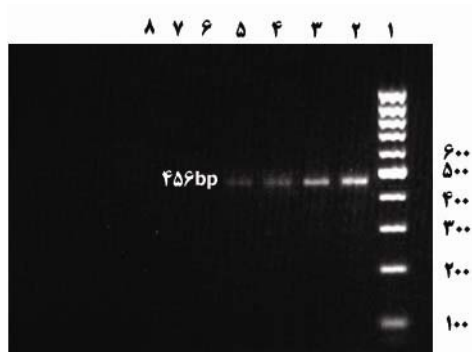
IgM

PCR

SERION-ELISA Classic Leptospira

. ()

Institut Virion / Serion GmbH



شکل ۱: الکتروفورز محصول PCR، (۱) مارکر 100bp (۲) ۱ ng (۳) ۱۰۰ pg (۴) ۱۰ pg (۵) ۱ pg (۶) ۱۰۰ fg (۷) ۱۰ fg (۸) بدون DNA

PCR

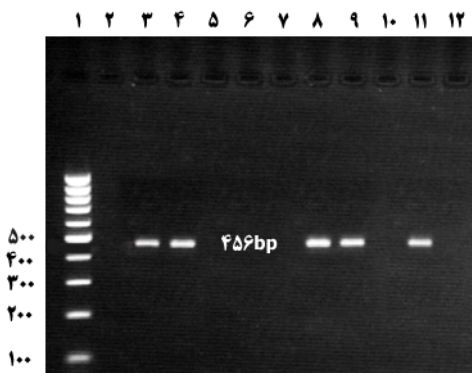
PCR

(/)

. ()

bp

DNA



شکل ۲: الکتروفورز محصول PCR نمونه‌های سرمی (۱) مارکر 100bp (۲) شاهد منفی (۳) شاهد مثبت (۴.۸.۹.۱۱) نمونه‌های سرمی مثبت لبتوسپیرا (۵.۶.۷.۱۰) نمونه‌های سرمی منفی لبتوسپیرا.

IgM

L. Pomona : Leptospira interrogans
L. copenhagenil L. icterohaemorrhagiae
L. grippityphosa L. Bratislava L. canicola
L. bataviae L. sejroe L. hebdomadis
L. hardjo L. tarassovi

IgM

(SERION Rheumatoid)

Factor Absorbent Z

IgM

(> U/ml)

bp

-

SrRNA

(NCBI)

(Generunner)

bp

PCR

DNA

PCR

PCR

IgM

()

()

IgM PCR :

PCR			IgM
(/)	(/)	(/)*	
(/)	(/)	(/)	
()	(/)	(/)	

*اعداد به صورت (درصد) تعداد می باشند.

PCR

: / ± / PCR

: / ± /

PCR

MAT

()

PCR (/)

PCR

PCR

(/) (/)

CSF

PCR

()

/

/

MAT
PCR

.()

-

.()

PCR

PCR PCR

.()

SrRNA S

LipL

bp

real-time

PCR

(Merien)

.()

SrRNA bp

DNA

.()

G₂ G₁

PCR

(L.Kirschneri)

Light cycler Taqman

PCR (real-time)

.()

.()

PCR

.()

DNA

PCR

.()

SrRNA

B

DNA

PCR

()

PCR

()

PCR

()

SSCP

()

(/)

()

()

()

IgM

IgM

(Dengue)

()

()

⁴ Single-Strand Conformation Polymorphism Analysis

	MAT		MAT
		.()	
PCR		PCR	
			IgM
	PCR		
	.()		
		PCR	
		.()	
	PCR		
		.()	

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