

( 2009 / 5 / 4 2009 / 2 / 22 )

	2ME	IgG	IgM	
				.
	2ME			%46.6 %40 %34.4
				.
	%30.95			
30	IgG	IgM		. %83.33

	IgG	IgM		2ME
				(P≤0.01)
				.

## **Evaluation of Latex and ELISA Efficiency in Diagnosis of Toxoplasmosis in Different Hosts**

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### **ABSTRACT**

The goal of this study was assessment and comparing between two common used tests in detection of Toxoplasmosis in different hosts. Two types of ELISA (IgM and IgG), and Latex 2ME tests were used for recognition of *Toxoplasma gondii* in women, ewe, and goat. Results showed that infection percentage were: 34.4%, 40%, and 46.6% in women, ewe, and goat respectively. When Latex 2ME test was used to distinction in between acute and chronic infection, the maximum acute infection was recorded in goat (30.95%), while the maximum chronic infection was (83.33%) in ewe. Thirty positive samples in Latex 2ME test for each host deposit to ELISA test (both IgM and IgG), and the outcome of this test confirm highly significant difference ( $P \leq 0.01$ ) in infection percentage among different hosts. And finally there was highly significant difference ( $P \leq 0.01$ ) between ELISA (IgM and IgG) test and Latex 2ME test in proportion of infection with Toxoplasmosis in hosts except women.

(Tenter, *et al.*, 2000)

Jenum, 1999; )

(Acici, *et al.*, 2008

(Fachado, *et al.*1997)

(Remington, *et al.*, 2000)

Bertoli )

(*et al.*1995

PCR

(Sabin-Feldman's dye test (SFT) - )

(Lynfield and Guerina, 1997)

.....

(Awad, 1954)

IgG IgM

IgG IgM

Wilson *et al.* )

(*al.*1990:Holliman, 1994

(Enzyme-linked immunosorbent assay (ELISA)

(OIE, 2008)

(Enzyme-linked immunofluorescent assay (ELFA)

Enzyme immunoassay

immunofluorescent detection

immunocapture

(Auer *et al.*, 2000; Silva and Neves, 2008; Paschale *et al.*, 2009)

(2000)

(2003 2000 )

2ME

10-5

:

.2

2-1

10

3000

20-

:

.3

kit

:

:

Biokit

Toxocell-Latex

. ( )

:

0.05

:

.

. 10X

2Hydroxyethyl Mercaptan 2ME

0.2

:

.

10

0.14

0.1

0.1

7.2

.(Desmonts and Remington, 1980)

37

: (ELISA)

:

Kit

Bioelisa Toxo-IgM

: IgM

-

Biocheck

IgM

Kit

Bioelisa Toxo-IgM

: IgG

-

Biocheck

IgG

. (2006)

.....

270

1

90

% 34.4

31

. % 46.6

% 40

2ME

%22.58

7

%30.95

%16.6

13 6

.(3 2 )

2ME

24

(2 )

29 30

%83.33

2ME

30

IgM

IgG

IgM

. 2ME

%36.6

IgG

(3 ) %56.6

%66.6

%46.6

:

(

30)

(Z test)

%30

%40

IgG

2ME

:

IgM

IgM

2ME

(P≤0.01)

IgG

2ME

.(3 )

(P≤0.01)

:1

(%65.5) 59	(%34.45) 31	90	
(%60) 54	(%40) 36	90	
(%53.3) 48	(%46.6) 42	90	
(%59.6) 161	(%40.3) 109	270	

:2

24	19	7	11	
30	10	6	20	
29	13	13	17	
83	42	26	48	

:3

77.41*	46.6*	22.58*	36.6 <sup>NS</sup>	
83.33*	40.0*	16.66*	66.6*	
69.04*	30.0*	30.95*	56.5*	

NS

(P≤0.01)

\*

.....

(Marianna *et al.*1990)

Saeed, 1998; Al-Doski, 2000; Bakir, )

(2002; Akreyi, 2008

(Wilson *et al.*1997)

(2005)

(2003)

(2000)

(2003 )

IgM IgG

2ME

3

. (Akreyi, 2008)

2ME

( )

IgG

Paschale *et al.*, (2009)

.  
Cross reaction

. Sarcocystis

Jenum and )

IgM

(Pedersen, 1997

(Dunn *et al.*, 1997)

.(BioRad, 2000)

(2000)

.(2006)

.(2005)

.(2000)

.(2003)

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