Final report PT-06: Toxo1/2021

PT-06: "Detection of anti-*Toxoplasma* IgG in animal serum samples"

Design

Purpose	Evaluation of laboratories competence on the detection of anti-*Toxoplasma* IgG in animal serum	
Scheme type	Single, simultaneous	
Participants	National Reference Laboratories for Parasites.	
N. of participants	Depending on request	
Method	To detect anti-*Toxoplasma* IgG in serum samples, labs may use: 1. three tests (ID Screen® Toxoplasmosis Indirect Multi-species Indirect ELISA TOXOS-MS, Toxoreagent Mast Diagnostica and PrioCHECK™ Small Rum Toxoplasma Ab Strip Kit), only if the laboratory has already these tests, or 2. two tests (ID Screen® Toxoplasmosis Indirect Multi-species Indirect ELISA TOXOS-MS, and PrioCHECK™ Small Rum Toxoplasma Ab Strip Kit). If necessary, these tests can be provided by the EURLP. Please note that it will not be possible to send a complete kit to each lab, but we can provide all the material necessary to perform the tests.	
Test method	At least two of the commercial kit mentioned above	
PT items	Matrix	serum
	Item	IgG
	N. of samples	6 for each participant
	Distribution	Immediate shipment after preparation
Subcontracted activities	NA	
Results evaluation	Qualitative	

Implementation

PT provider
Unit of Foodborne and Neglected Parasitic Diseases
Istituto Superiore di Sanità

Person in charge of PT
Dr. Alessandra Ludovisi
e-mail: alessandra.ludovisi@iss.it; tel: +39 0649903063

Viale Regina Elena, 299 – 00161 Rome, Italy

N. of participants	19	PT items	Serum samples	6
Public laboratories	0			
Private laboratories	0		PT panel composition	5 negative,1 positive
NRL	19		Shipping	DHL Express
Shipping dates	March 15 th 2021			

Results:

Kit used by participant

Laboratory code	ID Screen® Toxoplasmosis Indirect Multi-species Indirect ELISA TOXOS-MS	Toxoreagent Mast Diagnostica	PrioCHECK™ Small Rum. Toxoplasma Ab Strip Kit	Number of Kits used by participant
A	Yes	/	Yes	2/3
B	Yes	/	Yes	2/3
C	Yes	/	Yes	2/3
D	Yes	/	Yes	2/3
E	Yes	/	Yes	2/3
F	Yes	/	Yes	2/3
G	Yes	/	Yes	2/3
H	**Yes**	**Yes**	**Yes**	**3/3**
I	Yes	/	Yes	2/3
J	Yes	/	Yes	2/3
L	Yes	/	Yes	2/3
M	**Yes**	**Yes**	**Yes**	**3/3**
N	**Yes**	**Yes**	**Yes**	**3/3**
O	Yes	/	Yes	2/3
P	Yes	/	Yes	2/3
Q	Yes	/	Yes	2/3
R	**Yes**	**Yes**	**Yes**	**3/3**
S	Yes	/	Yes	2/3
T	Yes	/	Yes	2/3

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Legend:

- Laboratories that used three kits are marked in bold.

The PT final evaluation is qualitative only. The PT was considered passed if all positive and all negative samples were correctly identified by the participant.

Laboratory code	N° of samples correctly identified	N° of samples NOT correctly identified	Final evaluation
A	6	/	POSITIVE
B	6	/	POSITIVE
C	6	/	POSITIVE
D	6	/	POSITIVE
E	6	/	POSITIVE
F	6	/	POSITIVE
G	6	/	POSITIVE
H	6	/	POSITIVE
I	6	/	POSITIVE
J	6	/	POSITIVE
L	6	/	POSITIVE
M	6	/	POSITIVE
N	6	/	POSITIVE
O	6	/	POSITIVE
P	6	/	POSITIVE
Q	6	/	POSITIVE
R	6	/	POSITIVE
S	6	/	POSITIVE
T	6	/	POSITIVE

Note: All laboratories have shown 100% of agreement among replicates

Summary of results:

Total number of PT panels	19
Number of participant laboratories	19
Number of participants that passed the PT	19
Number of participants that failed the PT	0

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Overtime comparison of results: NA

Note: NA, not applicable

Comments:

Overtime comparison was not applicable because host serum samples change every year

PTP person in charge

Dr. A. Ludovisi

The Director

Dr. S.M. Cacciò

Date 30/09/2021

Notes:

1. To guarantee confidentiality, participant laboratories are identified by alphanumeric codes. PT participant identity is kept confidential and bound by professional secrecy. The PTP reserves itself the right to provide the laboratory PT result to the competent authority on request.
2. The organizer designates a qualified company for the transport and delivery of PT items.
3. Each participating laboratory receives a PT panel according to the PT scheme. Each PT item consists of a serum sample collected from *Toxoplasma gondii* infected animal as well as from *Toxoplasma gondii* free animal and tested for anti-*Toxoplasma* IgG by a commercial kit. All proficiency items with the same IgG titer were prepared from a single animal, in order to assure homogeneity. PT items (serum samples), stored between +4-+15°C, are stable for more than 1 month from the date of preparation.
4. At the beginning of each year, the organizer draws up a PT program and makes it known by sending an email to the NRLs
5. The final report issue of each PT round shows the PT program implementation.

End of the report

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