

## Final Report PT-EcMol 1/2018

### **PT “Molecular identification of *Echinococcus* at the species level”**

#### Design

Purpose	Correctly identify <i>Echinococcus granulosus</i> sensu lato and <i>Echinococcus multilocularis</i> by a molecular method.	
Scheme type	Single	
Participants	Public and private, European laboratories	
N. of participants	Depending on request	
Method	Not regulated	
Test method	chosen by the participant	
PT items	Matrix	Deionized water
	Item	DNA
	N. of samples	3 vials for each participant
	Distribution	Preparation and packaging can be performed before shipment
Subcontracted activities	NA	
Results evaluation	Qualitative	

#### Implementation

N. of participants	10	PT items	DNA	20 ng/μl
Public laboratories	10		matrix	10 μl
Private laboratories	0		PT panel composition	3 samples: 1 negative, 1 containing DNA of <i>E. granulosus</i> and 1 containing

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				DNA of <i>E. multilocularis</i>
NLR	10		Shipping	TNT Express
Shipping dates	12/03/18			

### Results

The final evaluation is only based on qualitative evaluation and is expressed as “positive” if the results of all samples are correct or “negative” if at least one result is incorrect.

Laboratory code	N° of samples correctly identified	N° of samples NOT correctly identified	Final evaluation
<b>E1</b>	3	0	Positive
<b>E2</b>	3	0	Positive
<b>E3</b>	3	0	Positive
<b>E7</b>	3	0	Positive
<b>E9</b>	3	0	Positive
<b>E10</b>	3	0	Positive
<b>E13</b>	3	0	Positive
<b>E17</b>	2	1	Negative
<b>E22</b>	3	0	Positive
<b>E27</b>	3	0	Positive

### Summary of results:

Number of participant laboratories	10
Number of participants that passed the PT	9
Number of participants that failed the PT	1

### Comments:

The experience derived from the first PT carried out in 2018 on the molecular detection of *Echinococcus* spp. showed that the personnel of NRLs are skill to detect this parasite in a qualitative test.

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Date 09/05/2018

Notes:

1. To guarantee confidentiality, participant laboratories are identified by alphanumeric codes. PT participant identity is kept confidential and bound by professional secrecy. If PT results have to be provided directly to a competent authority, the organizer shall send a written notice to inform the involved participants.
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 tube, containing DNA extracted from *Echinococcus granulosus* sensu lato (s.l.) or *Echinococcus multilocularis*. A third tube contains molecular grade deionized water and serve as a negative control. The stability of the samples in the package was evaluated by ad hoc experiments carried out by EURLP. Larvae preserved in 96% ethanol, and stored between -20 and +30°C maintain their stability up to 5 years after the date of preparation. DNA material stored below 15°C is stable for many years.
4. At the beginning of each year, the organizer draws up a PT program and makes it known by publishing it on the EURLP website (for national, international, public and private laboratories) or by email (NRLs).
5. The final report issue of each PT round shows the PT program implementation.

End of the report

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