

Istituto Superiore di Sanità

Department of Infectious Diseases
Unit of Foodborne and Neglected Parasitic Diseases



European Union Reference Laboratory for Parasites

PT-05: "Detection of *Echinococcus* spp worms in the intestinal mucosa of definitive host"

Instructions

The same day of items shipping, the participant receives a link to an on-line form where the following information must be reported:

- Package content and its condition of preservation
- Materials and Methods used to analyze PT samples
- Results

The on-line form remains active until the due date (specified in the PT request form), after this date, results will not be accepted.

At arrival in the lab, the packaging and its contents must be checked for correctness and completeness.

Before performing the test, the following remarks should be taken into account:

- 1. the samples have to be stored refrigerated at 4-15°C before the Sedimentation and Counting Technique (SCT) is performed, to prevent the damage of worms;
- 2. the test should be performed within 7 days after delivery to the lab;
- 3. to detect *Echinococcus* spp. worms in the mucosa samples, the method described below has to be applied;
- 4. any relevant difference compared to the SCT procedure must be reported in the on-line form;
- 5. samples should be handled by the qualified personnel, following the safety procedures requested for infectious biological material, i.e. wearing individual protection devices (coat, mask and gloves).

Protocol to be used for the analysis of mucosa samples:

- 1. transfer the whole sample into a glass bottle containing 1 L of saline solution (0.9% NaCl);
- 2. after a sedimentation time of 15-30 min, the supernatant is discharged and the bottle is refilled with saline solution;
- 3. repeat point 2, until the solution is sufficiently clear (usually 3 times);
- 4. the sediment is examined in portions of 40±10 mL in a Petri dish (e.g. 10x10 cm) with a counting grid under a stereomicroscope (at 25 x).

For any information or problem related to the PT participation, please address to:

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