

An innovative method for accurate and rapid identification

Early identification is key for **taking appropriate action** with infected animals and **reducing costs** related to treatment, infertility, and movement of animals.

The Pourquier IIF *Taylorella equigenitalis* Test is an indirect immunofluorescence (IIF) test, a **simple and cost-effective method** based on the direct detection of *Taylorella equigenitalis* bacterial bodies collected from swabs and fixed by acetone on microscope slides. The test is based on the specific binding of mouse monoclonal antibodies to the surface of the bacterium and identification of the monoclonals by a secondary antibody labeled with a fluorescein isothiocyanate (FITC) molecule. The reaction is observed through a fluorescence microscope (figure 1).

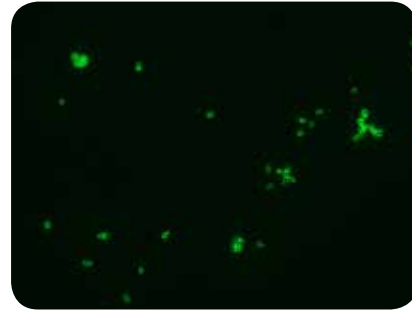


Figure 1. *Taylorella equigenitalis* as observed through a fluorescence microscope.

Test with Confidence™

IDEXX

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The Pourquier IIF *Taylorella equigenitalis* Test is OIE (World Organization for Animal Health) **validated and certified** as fit for the detection of *Taylorella equigenitalis* bacterial bodies from the swabs of the reproductive tract of stallions and mares for the following purposes:

- Certify freedom from infection or agent in individual animals for trade or movement purposes
- Control of infection in stallions and mares at the beginning of the breeding season

Oie

OIE Approval number: 20160111

Date of registration: May 2016

OIE official website link: <http://bit.ly/2Ajk9ZA>

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Pourquier* IIF *Taylorella equigenitalis* Test

Indirect immunofluorescence test for the detection of contagious equine metritis

Choose the Pourquier* IIF *Taylorella equigenitalis* Test as a rapid screening tool

Fast. Results in 2 hours.

Accurate. Results are comparable to culture and PCR methods.

Less restrictive conditions for transport of samples.

Samples can be transferred to the laboratory in 3 days in nonrefrigerated conditions versus culture, which requires one day in nonrefrigerated conditions and 2 days in refrigerated conditions.

Eliminates risk of false-negative results. The test detects viable and nonviable *Taylorella equigenitalis* bacterial bodies. The associated flora has no influence on the detection of *Taylorella equigenitalis*.

Excellent performance. The Pourquier IIF *Taylorella equigenitalis* Test has an analytical sensitivity and specificity of 100% for contagious equine metritis (CEM), as tested and evaluated by the European Reference Laboratory (ANSES Dozulé, France) and the OIE Reference Laboratory (CVI Lelystad, The Netherlands). The diagnostic performance of the Pourquier IIF *Taylorella equigenitalis* Test was compared with the culture method, which is considered the gold standard test:

- Diagnostic sensitivity: 100% in individual horses, 94.7% in individual samples
- Diagnostic specificity: 97.2% in individual horses, 97.6% in individual samples
- High negative predictive value even in case of nonexperienced operators: minimum 99.71%

Contagious equine metritis (CEM) is a **highly contagious venereal disease** that causes mucopurulent vaginal discharge and temporary infertility and disrupts breeding in infected mares. CEM is caused by ***Taylorella equigenitalis***, a Gram-negative, microaerophilic coccobacillus. The clinical detection of CEM is difficult because infected stallions and chronically infected mares are often asymptomatic.

Breeding organizations and many countries have strict regulations to avoid the introduction of CEM and request testing prior to breeding or movement. Its control depends upon early identification of infected carrier animals, followed by treatment or elimination from the breeding program. Negative is the expected result; positive results should be confirmed by culture.

Reliable results in a few simple steps

One Pourquier IIF *Taylorella equigenitalis* Test kit contains two vials of ready-to-use reagents for 40 tests:

- One vial of a pool of monoclonal antibodies: 1.2 ml.
- One vial of an anti-mouse FITC conjugate F(ab)'2 fragment (affinity purified): 1.2 ml.

The reagents should be stored away from light at $\leq -16^{\circ}\text{C}$ until the expiry date or up to 2 months at $2-8^{\circ}\text{C}$. The shelf life of the kit is 24 months at $\leq -16^{\circ}\text{C}$.

1 Preparation of reagents: Prepare phosphate buffer (PBS) pH 7.2 for washing of slides and buffered glycerin (1 volume of PBS and 9 volumes of glycerol) for mounting of cover slips.

2 Preparation of samples: Wipe swabs on the slides and fix by immersion in acetone bath for 15 minutes.



3 Sample distribution and incubation: Dispense $30\ \mu\text{l}$ of anti-*Taylorella equigenitalis* monoclonal antibodies and incubate for 30 minutes at 37°C .



4 Washing: Wash slides by immersion in a PBS bath under magnetic rod agitation for 15 minutes.

5 Conjugate distribution and incubation: Dispense $30\ \mu\text{l}$ of anti-mouse FITC conjugate and incubate for 30 minutes at 37°C .

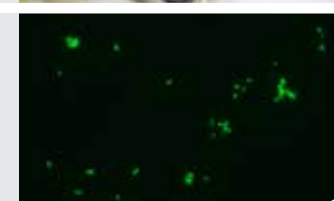


6 Washing: Wash slides by immersion in a PBS bath under magnetic rod agitation for 15 minutes.

7 Setting slides and reading: Set slides with buffered glycerin and read with a fluorescent microscope.



8 Interpretation: The presence of *Taylorella equigenitalis* is indicated by bacterial bodies with a typical fluorescence on cell wall and a nonfluorescent center.



The Pourquier IIF *Taylorella equigenitalis* Test is the only method **validated and certified by the OIE** for the detection of contagious equine metritis. This **rapid screening tool** provides an excellent alternative to the

culture method to **certify freedom from infection** in individual animals for trade, movement purposes, prevalence of infection, and control of stallions and mares at the start of the breeding season.