BioMed’s InPouch™ TF Feline test is a microbiology sample collection, transport, and culture device that allows for simultaneous growth and observation of *Trichomonas foetus*, the parasite responsible for the gastrointestinal infection trichomoniasis in felines. BioMed’s patented InPouch™ TF Feline test saves time and money, while reducing exposure to collected samples by combining several procedures into a single device.

The patented InPouch™ system consists of a high barrier, oxygen resistant, plastic pouch with two V-shaped chambers connected by a narrow passage. The innovative two-compartment system allows for direct preliminary observation of a newly collected specimen in the upper chamber before expressing the contents into the lower chamber for culture and further observation when necessary. Combining both growth and observation into one fully enclosed system removes the need to prepare wet mount slides increasing efficiency and throughput while decreasing the cost of laboratory materials and medical waste. Additionally, the InPouch™ design lends itself to high performance in off-site or austere environments with limited reliance on laboratory equipment. The InPouch™ TF Feline can be stored for up to one year at room temperature (18-25 °C) and can be held at this temperature for up to 48 hours before incubation is required.

Transport from off-site locations and point-of-care testing can be performed easily due to the flexibility, robustness, and integral design of the InPouch™ system. The InPouch™ TF Feline is known as “The Gold Standard” diagnostic for this infection. The proprietary medium of the InPouch™ TF Feline is selective for the transport and growth of *Trichomonas* and increases specificity by inhibiting the growth of yeasts, mold, and bacteria.

**Quality Control**

Quality control testing is performed on each lot of InPouch™ TF Feline prior to shipment in order to ensure viability, doubling time and sterility. Quality control tests are repeated throughout the product shelf life by BioMed Diagnostics confirming the ability of the InPouch™ TF Feline to support the growth of *T. foetus*, while maintaining suppression of commensal microflora.

**Background**

Feline trichomoniasis, commonly known as “trich,” is caused by the single celled, flagellated protozoan parasite, *Trichomonas foetus* and is known to be a pathogen found in the gastrointestinal tract of cats. Feline trichomoniasis infects and colonizes the large intestine, causing prolonged and intractable diarrhea, which can cause death. This parasite mainly causes colitis with an increased frequency of defecation as well as semi-formed to liquid feces, which is usually associated with blood or mucus.

Trichomoniasis is found mostly in young cats and kittens, the majority of which are less than 12 months of age. One study has shown no difference in susceptibility between males and females or between pure and mix-breed cats. Infection is most common in colonies of cats and multi-cat households, making shelters especially susceptible to outbreaks. *T. foetus* is often misdiagnosed as Giardia, however, the InPouch™ TF Feline test specifically discriminates against Giardia eliminating any risk of false positives due to this parasite.
InPouch™ TF Feline Directions

Specimen collection for culture should be taken from feline rectal swabs, flushes or fecal samples. If mucus has been passed with the feces, it is the most likely place the organism will reside.

To inoculate the upper chamber, tear along the notched area and pull the tabs to open the InPouch™ then introduce the sample. After inoculation, squeeze the top to close and fold the top edge down, roll twice and fold the wire tabs to prevent the InPouch™ from opening. Immediate specimen concentration can be observed under the microscope using the accompanying viewing clip. Only a few viable organisms are needed for detection; an inoculum containing 1 to 10 organisms is sufficient to result in a presumptive positive test.

To culture the InPouch™ TF Feline, express all liquid from the upper chamber into the lower chamber; use the edge of a straight hard surface, such as a workstation or table, for best results. Roll down the pouch until it reaches the top of the lower chamber then fold the wire tabs to lock the InPouch™ into position. Inoculated InPouch™ TF Feline medium can be held up to 48 hours at room temperature (18°-25°C), before incubation at 37°C is required. Best practice suggests specimens should be examined every 24 hours for six days. The test is considered positive if growth is noted at any time and is considered a presumptive negative only after incubation of six days with no growth.

Detection

As the parasites multiply, white sediment along the sides and bottom of the chamber will become visible. Five flagella arise from the organism, four immediately extend out, while the fifth wraps backwards along the surface of the organism and a barb-like axostyle projection can be seen across from the four-flagella bundle. If T. foetus organisms are present, they will be identifiable by their distinct features; characteristically the rolling, jerky motions exhibited by the protozoan.

Advantages

- **High Throughput** - Once the device is inoculated no other culture preparation is required saving time
- **Cost Savings** - The InPouch™ TF Feline reduces laboratory materials and medical waste
- **High specificity** - Designed for the growth of Tritrichomonas foetus by inhibiting the growth of yeasts, mold, and bacteria
- **Functional** - PCR compatible transport and incubation device
- **Convenient** - Combines collection, culture, and observation into one device
- **Easy to use** - Minimal lab procedures and equipment needed
- **Easy to store** - One year shelf life at room temperature
- **Mobile** - Compact and nonbreakable package is ideal for off-site sampling or for point-of-care testing
- **Safe** - Fully enclosed InPouch™ system prevents contamination and reduces exposure to collected samples

Product Specifics

- **Storage** - Room Temperature (18-25 °C)
- **Shelf Life** - 12 months Incubation - 37°C
- **Quantity Available** - 5 Pack (11-1107) 100 Pack (11-1103)

Live T. foetus culture suitable for research, quality control testing, training and reference is also available from BioMed Diagnostics within the U.S. Live cultures require maintenance by passaging.

Catalogue Number (11-1115)

Live culture samples are delivered in UN3373 compliant packaging

REFERENCES


MicLev

Quality Products for Microbiology