enfer DIAGNOSTICS

ParaTub-SL®

Powerful Johne's Detection For Total Peace of Mind

Mycobacterium paratuberculosis is the causative agent of Johne's disease and can be economically devastating to dairy farms. It significantly impacts milk production and disrupts herd management. It's estimated that at least 25% of U.S. dairy herds are infected with Johne's — that's one in four cows.

With milk production costs ever increasing, it's impossible to ignore this harmful disease, and imperative to use the most accurate test available: ParaTub-SL®.

Early Johne's Detection Reliable Herd Protection

Failure to detect Johne's disease early can lead to high infection rates — an expensive crisis given the cost implications of reduced milk production, combined with the costs to control and eradicate the disease.

ParaTub-SL® provides the earliest detection available. Sensitive and specific, it detects live, intact bacteria in bulk milk, unprocessed or homogenized, with results in under three hours. This superior test offers accuracy and reliability that's also cost efficient.

Combined with aggressive management, ParaTub-SL® can eradicate Johne's faster, better, and with optimum assurance.

Close The Uncertainty Gap™ With ParaTub-SL®

Dairy Farmers

Protect your animal investment because the costs of Johne's disease are staggering.

- $250 million in annual U.S. industry losses
- $200 per cow annual production losses in infected herds
- 1,000 to 6,000 pounds loss milk production per infected cow

No step is more important for protecting your herd and your revenue potential than rigorous testing, and no test is better at exposing Johne's than ParaTub-SL®.

- Unparalleled diagnostic sensitivity provides the earliest and best detection possible
- Reliability and accuracy enhance the effectiveness of your biosecurity measures
- Using proper protocols, bulk tank sampling makes screening cost efficient
- Use of milk samples can be easily integrated into routine herd-health protocols

Veterinarians & Diagnosticians

Current Johne's tests significantly limit the ability to detect infections and improve herd health, so insist on the reliability and ease of ParaTub-SL®.

- Fecal sample matrix difficult to handle, costly, takes 3-4 months for results
- Serological ELISA have specificity issues and are unable to detect infection in early stages when antibodies aren't being produced
- As veterinarians attempt to contain or eliminate Johne's disease from dairy herds, a more reliable and sensitive test is needed

ParaTub-SL® is innovative and accurate technology you can use with greater ease and certainty. It uses *real time* Polymerase Chain Reaction with unique and proprietary immunomagnetic separation (IMS) nano particles to detect intact bacteria in bulk milk, unprocessed or homogenized.

- IMS step isolates live, intact bacteria
- High sensitivity and specificity improves disease containment measures
- Faster sample to result (<3 hours) for more effective herd-health management
- ParaTub-SL® detects sub-clinical animals and low shedders

ParaTub-SL®

For Fast, Reliable Results

The diagnostic choices for detecting Johne's have long been inadequate. There's testing that's slow, unwieldy, expensive, and somewhat accurate. Or testing that's faster, somewhat affordable, but still not altogether accurate.

ParaTub-SL® delivers reliable results through fast turnaround that's economical, easy, and accurate so you can test with confidence.

- **Simple and Rigorous.** Detects *live,* intact bacteria in bulk milk, unprocessed or homogenized
- **Sensitive and Specific.** Proprietary molecular assay design eliminates false positives, false negatives
- **Early Detection.** Detects prior to seroconversion with results in hours
- **Superior Strain Diversity.** Amplification target is not IS900 which can lead to nonspecific or false-negative results

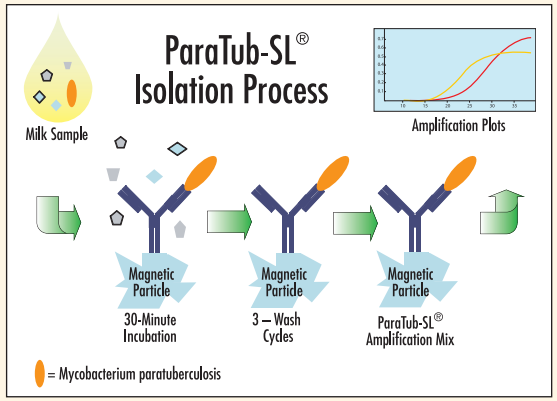
Innovation by

AnDiaTec

High Throughput

Less lab time with fewer steps for optimum efficiency and accuracy.

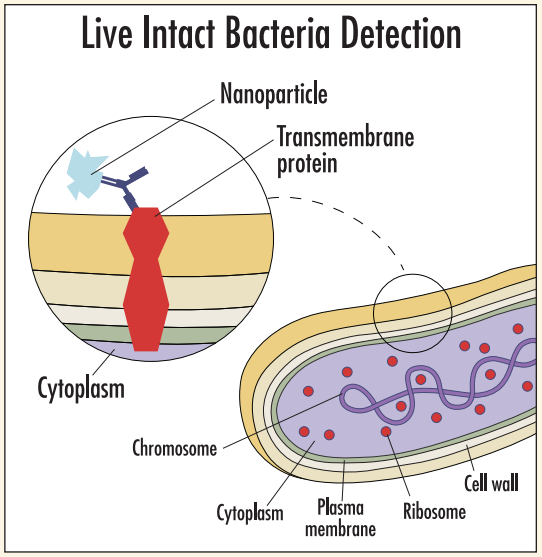
- Completely automated from sample prep to PCR well transfer
- Ready-to-use amplification master mix
- 4-step, 45-minute IMS extraction, straight to PCR
- No post-IMS DNA extraction necessary
- Basic instrument setup handles 900+ samples per day
- Robust sample type; fresh or frozen milk (not soured)



Greatest Accuracy

ParaTub-SL® closes the Uncertainty Gap™.

- Detects live bacteria before seroconversion
- Enhanced sensitivity detects single shedder in 277 gallons of milk
- Not IS900 targeted
- Higher analytical sensitivity than other methods by a factor of 10 - 100



Simply Superior

Numerous ParaTub-SL® studies demonstrate an overall diagnostic sensitivity and specificity of 99.3% and 98.7%, respectively. Significantly outperforming other available diagnostic tests.

- Fecal sample culture — ParaTub-SL® outperforms culture by 21.0%
- Milk sample culture — ParaTub-SL® outperforms culture by 22.5%
- Serum ELISA — ParaTub-SL® doubled combined performance of commercially-available tests
- *Real time* and conventional PCR — Proprietary extraction, protocol, and unique reagents of ParaTub-SL® provide superior extraction and detection to outperform other assays

For more information about Enfer Diagnostics, contact:

email info@enferdiagnostics.com
www.enferdiagnostics.com
www.andiatec.com

enfer DIAGNOSTICS