

DNA
DIAGNOSTIC

Salmonella

Fast and
accurate
diagnostics of
SALMONELLA
4 COWS

Salmonella spp. Salmonella Dublin

- Fast

Sample to result in 3 hours
for 96 samples

- High sensitivity & specificity

LOD: 1×10^3 Salmonella cells per 1 g
feces

- Easy handling

Protocols for feces and swabs

- Complete kit

Extraction, lysis and qPCR materials
included

- No specialized equipment

Salmonella free
Animal welfare



Introduction

Gastrointestinal infection with different *Salmonella* species or *Salmonella enterica* subsp. *enterica* serovar dublin (*S. dublin*) is prevalent in many cattle herds worldwide.

It causes increased morbidity, mortality and production losses. Even though it is host-adapted, *S. dublin* occasionally causes human infections that tend to be severe due to the invasive nature of this infection.

Controlling *S. dublin* in cattle herds requires intervention to minimize the bacterial spread.

A test-and-cull strategy to remove persistently infected cattle has long been considered an important control element.

The *Salmonella* 4 cows kit is a fast, low-cost and easy-to-use method for the detection of *Salmonella* spp. and Dublin, directly from feces samples, swabs from feces/rectum, or swabs from the environment (e.g. boot swabs).

The *Salmonella* 4 cows kit contains material for Fecal/Swab DNA extraction using a simple 96 deepwell-based extraction protocol (alternatively using single tubes) and qPCR mix pre-aliquoted in 8-strip tubes fitting your instrument.

Multiple uses:

This kit can also be used for screening for Johne's disease. All you need is to buy the Mastermix for ParaTB, and then you are ready to screen for a completely different disease with the same kit.

What is qPCR testing?

The quantitative polymerase chain reaction (qPCR) is a biochemical technology used to amplify a specific DNA target in a test tube. During amplification, fluorescent light is generated and monitored by the qPCR instrument. Today, qPCR is a common diagnostic technique and it is used for a wide variety of applications.

Key Requirements

- qPCR instrument with FAM, ROX and CY5 filters
- Centrifuge for 96-well plates (minimum 5000 RCF)
- 96-(deep)well mixer/vortexer

Easy and fast workflow



DNA extraction

Inhibitors removed
and *Salmonella* lysed



qPCR

Run *Salmonella* program

Sample Protocols for:

- Fecal samples directly
- Sarstedt feces tubes
- eNAT swabs from feces/environment/rectum (ambient temperature stable for 3 days - easy sampling and transport)
- Environmental swabs (e.g. Boot swabs)

The entire protocol from DNA extraction to result can be carried out in as little as 3 hours for 96 samples.

The complete kit has a limit of detection (LOD) of 1×10^3 *Salmonella* cells per gram of fecal matter, or 1×10^2 *Salmonella* cells per sample input (one swab or 0,1 g feces).

Catalogue numbers

S4CB

For more info visit www.dna-diagnostic.com or contact Tel +45 87 32 30 50 · info@dna-diagnostic.com

DNA DIAGNOSTIC

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About us DNA Diagnostic A/S is a Danish biotech company established in 1992. DNA Diagnostic develops and manufactures qPCR test kits for rapid identification of pathogenic microorganisms. DNA Diagnostic also makes CE-IVD kits for detecting leukemia related translocations. DNA Diagnostic is ISO 13485 certified.

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