

# Fast detection of **mastitis bacteria** in milk

## Mastit 4

Identifies the main  
mastitis-causing bacteria in  
bovine milk samples, without  
the need for any bacterial  
culturing steps.

## Mastit 4

PCR test is the answer...

- **Fast**  
Results in 3 hours
- **Easy to handle**  
Very few handling steps
- **High sensitivity**  
Higher than other commercial qPCR tests
- **Cost efficient**  
Low costs for both kit and hands-on time
- **4, 8, or 12 mastitis bacteria**  
Detected in one analysis
- **Mycoplasma detection**  
Included in results

## Introduction

Mastit 4 identifies the main mastitis-causing bacteria in bovine milk samples, without the need for any bacterial culturing steps. Mastit 4 testing can be conducted at any stage of the milk production process, from the farm to milk tankers or at the dairy.

Samples can be preserved to prevent bacterial growth during transportation, allowing the shipment of samples at ambient temperature. Mastit 4 also simultaneously detects growth-inhibited microorganisms and all targeted bacteria in the milk sample. Mastit 4 has higher sensitivity than other currently available qPCR methods and it is much, much faster and simpler to perform.

## 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. The appearance of fluorescent light can be correlated to the number of targets in the sample. Today, qPCR is a common diagnostic technique and it is used for a wide variety of applications.

## Easy and fast workflow



DNA extraction

0,5 ml samples are pelleted and directly lysed for DNA extraction



qPCR

Run Mastit 4 program

Target \ Cat. No.*	M4A	M4B	M4C	M4D	M4E	M4F	M4BD	M4BDF
Staphylococcus aureus	+	+	+		+		+	+
Streptococcus agalactiae	+	+	+		+		+	+
Streptococcus dysgalactiae	+			+			+	+
Streptococcus uberis	+	+					+	+
Mycoplasma bovis		+	+		+		+	+
Mycoplasma species			+	+			+	+
$\beta$ -Lactamase gene (blaZ gene)				+			+	+
Coagulase Negative Staphylococcus				+			+	+
Prototheca					+	+		+
E.coli						+		+
Klebsiella						+		+
Enterococcus and Lactococcus lactis						+		+

\* Each kit contains material for analysis of 384 milk samples.

For more info visit [www.dna-diagnostic.com](http://www.dna-diagnostic.com) or contact Tel +45 40417396 · [jk@dna-diagnostic.com](mailto:jk@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 real-time PCR test kits rapid identification of pathogenic microorganisms in the food and pharmaceutical industries, including tests for the diagnosis of mastitis and for salmonella. DNA Diagnostic also makes CE-IVD kits for the rapid diagnosis of leukaemia. DNA Diagnostic is ISO 9001 and ISO 13485 certified