

# Microsart® RESEARCH Mycoplasma

Mycoplasma Detection Kit for qPCR

# **Benefits**

- Easy to use
- Highest Flexibility
- Maximum reliability



# **Product Information**

Microsart® RESEARCH Mycoplasma enables a fast and reliable detection of *Mycoplasma* DNA in cell culture supernatants most applicable in research and development. Carefully selected primer | probe combinations are highly specific for a region within the 16 S rRNA gene of at least 110 Mycoplasma species.

# **Working Principle**

 $2~\mu l$  of sample material, e.g. cell culture supernatant, can be added directly to the PCR reaction tube. For the detection of Mycoplasma DNA a TaqMan® real-time qPCR is used. Depending on the sample matrix a standard spin-column based DNA preparation can be done prior to PCR analysis to increase sensitivity or prevent inhibition. 200  $\mu l$  sample volume can be used as starting material for DNA preparation if using the Microsart Amp Extraction kit. 2  $\mu l$  of isolated DNA extract is amplified in a qPCR cycler and the evaluation can be performed with the standard cycler software.

# **Applications**

The Microsart RESEARCH Mycoplasma real-time PCR protocol is especially designed for fast and reliable screening of cell culture supernatants most applicable in research and development, e. g. biotech and biopharmaceutical research and development, university and governmental research groups.

It is used for direct detection of *Mollicutes (Mycoplasma, Acholeplasma, Spiroplasma)* in cell culture, cell culture media components and derived biologicals.

### **Fast Results**

Microsart® RESEARCH Mycoplasma utilizes real-time PCR (qPCR). The kit can be performed with any type of real-time PCR cycler able to detect the fluorescence dyes FAM™ and ROX™. The detection procedure can be performed within 3 hours.

#### **Easy Handling**

The kit contains all essential components in a function tested ready-to-use master mix.

- Screening with a small sample volume
- Cost saving no EP 2.6.7 compliance required

## TaqMan® Probes

The use of TaqMan® probes adds specificity to the PCR detection system. The analysis is performed during the cycling process – no melting curve analysis is needed.

#### **Contamination Prevention**

The kit contains dUTP instead of dTTP, so the option is available to degrade amplicons from previous analyses by use of uracil–DNA glycosylase (UNG). Thus the occurrence of false–positive results can be minimized. UNG is not inculded in the kit.

#### Summary

For scientists and lab technicians who need to screen cell culture supernatnants for *Mycoplasma* DNA, Sartorius offers the Microsart® RESEARCH Mycoplasma Detection Kit.

Unlike competitive PCR Detection kits, the Microsart® RESEARCH Mycoplasma offers a very high specificity and sensitivity combined with easy handling and convenient storage conditions.

# **Technical Specifications**

Each Kit contains reagents for 25 or 100 reactions. The expiry date of the unopened package is specified on the package label. The kit componeents are to be stored until use at +2 to +8°C and must be stored after opening and rehydration below -18°C. The lot specific Certificate of Analysis can be downloaded from the manufacturer's website (www.minerva-biolabs.com).

Kit Component	25 Reactions	100 Reactions
Order No.	SMB95-1005	SMB95-1006
Mycoplasma Mix	$1 \times lyophilized$	4 × lyophilized
Rehydration Buffer	1 × 1.0 ml	2 × 1.0 ml
Positive Control	1 × lyophilized	$1 \times lyophilized$
PCR grade Water	1 × 1.0 ml	1 × 1.0 ml

# **Ordering Information**

Description	Quantity	Order No.
Mycoplasma Kits		
Microsart® RESEARCH Mycoplasma	25	SMB95-1005
Microsart® RESEARCH Mycoplasma	100	SMB95-1006
Accessories		
Microsart® AMP Extraction	50 extractions	SMB95-2003
Related Products		
Microsart® AMP Mycoplasma	25	SMB95-1001
Microsart <sup>®</sup> AMP Mycoplasma	100	SMB95-1002
Microsart® ATMP Mycoplasma	25	SMB95-1003
Microsart® ATMP Mycoplasma	100	SMB95-1004

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