

Product Information

MYCO^{Direct} 1.7

LCD-Array Kit



For Research Use Only [RUO]

Identification of *Mycobacterium tuberculosis* Complex (MTUB)
and *Mycobacteria other than tuberculosis* (MOTT)



Simple

PCR based macro array assay on polymer supports.



Robust

Non fluorescent detection chemistry.



Fast

90 minutes PCR, 45 minutes array protocol.



Cost efficient

Minimal lab instrumentation required.



Reliable

Automatic, software assisted data read-out.

Technology for your daily routine.

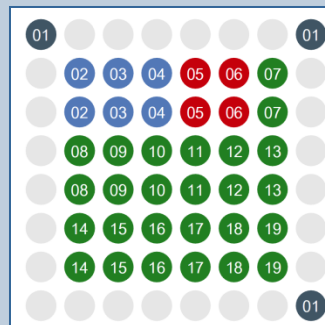
Assay Principle

Using the provided primer mixes, biotinylated PCR products are generated from sample material containing extracted bacterial DNA. The labeled amplicons are hybridized to species specific capture probes immobilized on the LCD-Chip surface. Following a short wash routine, comprising high stringency, visualization of bound amplicons is mediated by an enzyme-substrate cascade. Each LCD-Chip contains eight identical micro arrays separated in small reaction chambers which can be addressed individually.

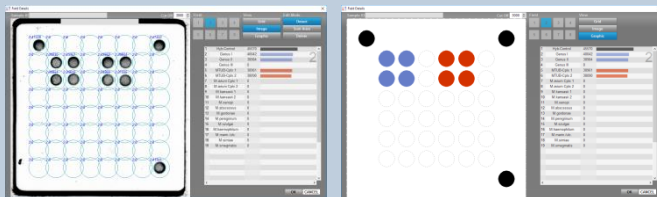
Target Region & Sensitivity

Primer mix A is directed against highly conserved motifs flanking the internal transcribed spacer region of the 16S rRNA gene cluster. Specific capture probes immobilized as duplicates permit the simultaneous identification of the 16 'Mycobacteria Other Than Tuberculosis' (MOTT). Primer mix B, directed against the insertion sequence IS6110, guarantees excellent sensitivity for the identification of all members of the 'Tuberculosis Complex' (MTC). Detection limits are 50 genome equivalents (GE) per reaction for MOTT and 1 GE for MTC. Due to the small amplicon sizes (127 bp and 200-300 bp) the assay is very well suited for the analysis of FFPE tissue sections.

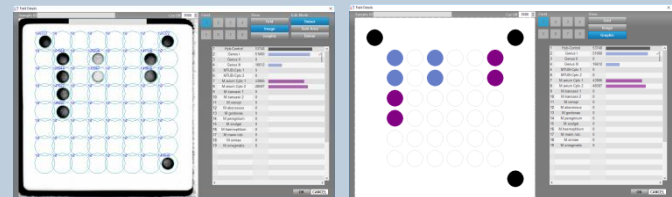
Array Pattern



01	Hyb-Control
02	<i>Mycobacteria</i> Genus I
03	<i>Mycobacteria</i> Genus II
04	<i>Mycobacteria</i> Genus III
05	MTUB Complex (ITS)
06	MTUB Complex (IS6110)
07	<i>M. avium</i> Cplx 01
08	<i>M. avium</i> Cplx 02
09	<i>M. kansasii</i> 01
10	<i>M. kansasii</i> 02
11	<i>M. xenopi</i>
12	<i>M. abscessus</i>
13	<i>M. goodnae</i>
14	<i>M. peregrinum</i>
15	<i>M. szulgai</i>
16	<i>M. haemophilum</i>
17	<i>M. marinum</i> / <i>ulcerans</i>
18	<i>M. simiae</i>
19	<i>M. smegmatis</i>



A: Detection of *Mycobacterium tuberculosis* Complex

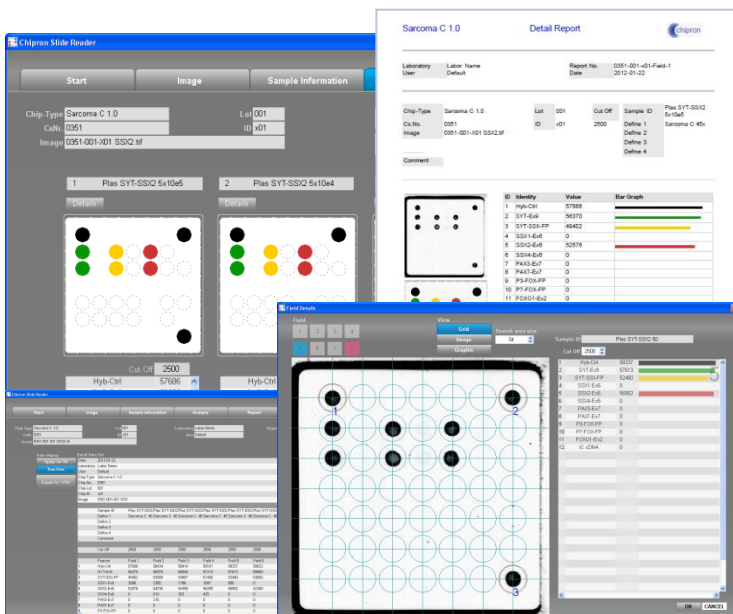


B: Detection of *Mycobacterium avium*

Software

SlideReader V12

- Fully automated image analysis
- Data reports in PDF format
- Win XP & WIN7 compatible



Instruments

CHIP-Scanner PF7250u



- Transmission light scanner for LCD-Arrays,
- 10 µm resolution

CHIP Spin FVL2400



- Bench Top mini centrifuge
- 2400 rpm, constant
- Adaptor for LCD-Arrays

Order Information	Cat. N°.
MYCO 1.7 LCD-Array Kit, 32 Tests	B-500-04
MYCO 1.7 LCD-Array Kit, 96 Tests	B-500-12
CHIP-Scanner PF7250u	HS-500-01
CHIP-Spin FVL2400	HS-300-01
SlideReader Software	HS-200-01