

# Tuberculosis Microbiology



**HARDY**  
DIAGNOSTICS  
*A Culture of Service™*

# Tuberculosis Microbiology

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### Distribution Centers

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Phoenix, Arizona  
Dallas, Texas  
Springboro, Ohio  
Lake City, Florida  
Albany, New York  
Raleigh, North Carolina

Hardy Diagnostics has a Quality Management System that is certified to ISO 13485 and is a FDA licensed medical device manufacturer.



FM 572526

## SELECTION

Since 1980, Hardy Diagnostics has grown to manufacture an extensive selection of prepared media products which are packaged in plates, tubes, bottles, bags, and flasks.



## GUARANTEED DATING

We provide at least one month of shelf life on most products.



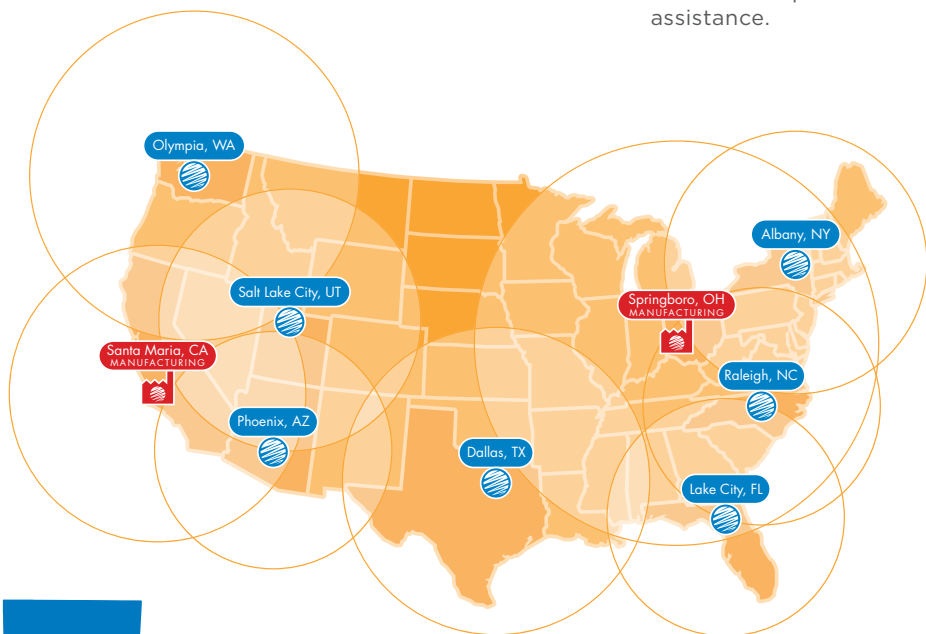
## QUALITY CONTROL PROGRAM

Hardy products go through rigorous and extensive QC testing. Lot specific Certificates of Analysis are available at [HardyDiagnostics.com](http://HardyDiagnostics.com).



## TECHNICAL ASSISTANCE

Instructions for Use (IFU) are available for all products through our web catalog. Experienced Medical Technologists and microbiologists are available for personalized assistance.



## Online Ordering

# Media for the Cultivation and Identification of Tuberculosis

## Arylsulfatase Broth

For use in detecting arylsulfatase production in rapidly growing *Mycobacteria* spp.

0.001M, 2ml, 16x125mm tube,  
20pk.....K93

0.003M, 2ml, 16x125mm tube,  
20pk.....K94

## Carbon Utilization

For the differentiation of *Mycobacterium* spp.

**Carbon Utilization Base, Slant,**  
20x125mm tube, 20pk.....Y125

**Carbon Utilization with Inositol, Slant,**  
20x125mm tube, 20pk.....Y126

**Carbon Utilization with Mannitol, Slant,**  
20x125mm tube, 20pk.....Y127

**Carbon Utilization with Citrate, Slant,**  
20x125mm tube, 20pk.....Y128

## Lowenstein Jensen

Egg based media for use in the cultivation and isolation of *Mycobacterium* spp.

**Deep Fill, 5ml, 20x150mm**  
polycarbonate tube, 20pk.....C27

**Slant, 10ml, 20x125mm**  
glass tube, 20pk.....C21

**HardyFlask™, 20pk.....X22**

## Bovine Serum Albumin

Enhances the growth of *Mycobacteria* spp.

Tube, 3ml, 13x100mm polycarbonate tube,  
20/bx ..... Z81

## Lowenstein Jensen - Gruft Modification

**Slant, 5ml,**  
20x125mm glass tube, 20pk.....C23

**HardyFlask™, 20pk.....X23**

## Lowenstein Jensen with Pyruvate

**Slant, 5ml,**  
20x125mm polycarbonate tube, 20pk.....C28

**HardyFlask™, 20pk.....X19**

## Lowenstein Jensen - Selective

Addition of cycloheximide, lincomycin, and nalidixic acid.

**Slant, 5ml,**  
20x125mm glass tube, 20pk.....C25

## Lowenstein Jensen with Sodium Chloride

**Slant, 5ml,**  
20x125mm polycarbonate tube, 20pk.....C29

## Lowenstein Jensen with Ferric Ammonium Citrate

**HardyFlask™, 20pk.....X21**





**Middlebrook 7H9**

Recommended for use in the cultivation of *Mycobacterium* spp. from sterile fluids.

**Middlebrook 7H9 with Tween® 80,**  
5ml, 16x125mm polycarbonate tube,  
20pk.....C62

**Middlebrook 7H9 Broth,**  
10ml, 16x125mm polycarbonate tube,  
20pk.....C32

**Middlebrook 7H10**

Agar based media for the isolation and cultivation of *Mycobacterium* spp.

**Middlebrook 7H10,**  
Deep fill, 26ml, 15x100mm plate,  
10pk.....W30

Slant, 20x125mm tube,  
20pk.....C34

HardyFlask™, 20pk.....X26

**Middlebrook 7H10 with 10% Human Blood,**  
10ml, 20x125mm polycarbonate tube,  
20pk.....C42



# Media for the Cultivation and Identification of Tuberculosis

## Middlebrook 7H11

Recommended for use in the cultivation and isolation of *Mycobacterium* spp.

## Middlebrook 7H11

Deep fill, 28ml, 15x100mm plate,  
10/pk ..... W35

HardyFlask™, 20pk .....X25

Space Saver Plate, 10x100mm,  
15pk..... SP57

Slant, 20x125mm polycarbonate tube,  
20/pk ..... C36

## Middlebrook 7H11 Selective

Deep fill, 15x100mm plate,  
10/pk ..... W40

Slant, 20x125mm polycarbonate tube,  
20/pk .....C38

HardyFlask™, 20/pk .....X28

Middlebrook 7H11/Middlebrook 7H11  
Selective, Biplate, 15x100mm, 10/pk..... J75

## Middlebrook ADC Supplement

Bottle, 20ml fill, 60ml bottle,  
10/pk .....X95

## Middlebrook OADC

Bottle, 100ml fill, 180ml bottle,  
each ..... U98

## Nitrate Substrate Broth

For the determination of nitrate reactions of *Mycobacteria* spp. Use with AFB nitrate reagents (Cat. nos. Z124 and Z125).

Tube, 2ml, 13x100mm tube,  
20/pk .....R97

## Pyrazinamidase Agar

For the differentiation of *Mycobacteria* spp. by pyrazinamidase activity.

Tube, 5ml, 16x125mm tube,  
20/pk ..... K158

## Wallenstein

Recommended for use in the cultivation and isolation of mycobacteria other than tuberculosis. It is particularly useful in the recovery of *Mycobacteria avium* complex.

Slant, 20x125mm tube,  
20/pk .....C61



# Reagents and Disks

## Caffeic Acid Disks

A rapid test to detect the ability of an organism to produce the enzyme phenyloxidase; useful for the identification of *Cryptococcus neoformans* and *Cryptococcus gattii*.

25 disks/pk ..... Z118

## Nitrate Reagents

Recommended for use in the determination of nitrate utilization by *Mycobacterium* spp.

**AFB Nitrate Reagent A** (Sulfanilamide, 0.2%)  
15ml ..... Z124

**AFB Nitrate Reagent B**  
(Naphthylethylenediamine Dihydrochloride, 0.1%)  
15ml ..... Z125

# Staining and Slide Preparation

## AFB Stain Kit

Carbol Fuchsin (Kinyoun), Acid Alcohol 3%, Methylene Blue Counterstain.

3x8 oz.....AF900

## Acid-Fast Smear Fix

For BACTEC™ blood cultures, for better slide adhesion of specimens,

15ml ..... Z56

## Acid Alcohol, 3% HCl in Alcohol

For AFB staining, Kinyoun or Ziehl-Neelsen.

250ml.....AA008

## AFB Brilliant Green Stain Kit

Contains Carbol Fuchsin (Kinyoun), Acid Alcohol 3%, Brilliant Green Counterstain.

3x8 oz.....483KB

## Carbol Fuchsin (Kinyoun)

250ml..... CF008

## Methylene Blue Counterstain

For Acid-Fast stain procedures and other uses. An aqueous solution of methylene blue.

16 oz .....675A16

## Methanol

32 oz..... VMT032

1 gallon ..... 107B128

## BlueMount™

A permanent slide mount for mycology specimens that contains the stain lactophenol cotton blue. Produces a long lasting permanently stained slide. Contains polyvinyl alcohol (PVA) that will dry and set up hard. Creates a perfectly preserved slide.

15ml vial ..... Z137

## Lactophenol Cotton Blue

For staining fungi on slide wet mounts.

15ml vial .....Z68

## Potassium Hydroxide

For use in slide preparations of specimens for the purpose of identifying fungal elements. Dissolves epithelial cells that may mask fungal elements.

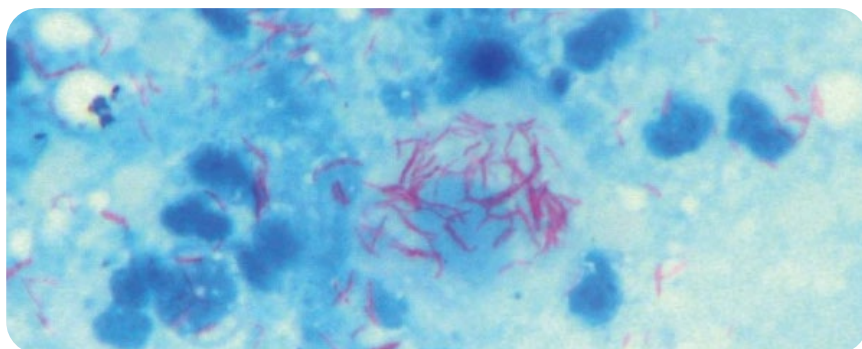
10%, KOH, 15ml vial.....Z77

20%, KOH, 15ml vial.....Z78

## India Ink

For use in the identification of *Cryptococcus neoformans* by detection of the polysaccharide capsule. India ink is a negative stain that will show a clear zone where the capsule is.

15ml bottle ..... Z64



# Direct Specimen Staining Fluorescent Method



**AFB Fluorescent Stain Set (Auramine O)**  
Auramine O stain kit includes one 250ml bottle of each of the following: auramine O fluorescent stain, decolorizer and potassium/permanganate.

3x250ml..... 418K

## Auramine Fluorescent Stain

An aqueous solution of phenol and auramine O Stain.

250ml..... 418D8

## Auramine-Rhodamine Stain

An aqueous solution of phenol, glycerine, isopropyl alcohol, rhodamine B and auramine O.

250ml..... 789D8

32 oz..... 789D32

3x250ml..... 630K

## Potassium Permanganate (0.55%)

An aqueous solution of potassium permanganate.

250ml..... PPC18



AFB Fluorescent Stain Set





# Control Slides

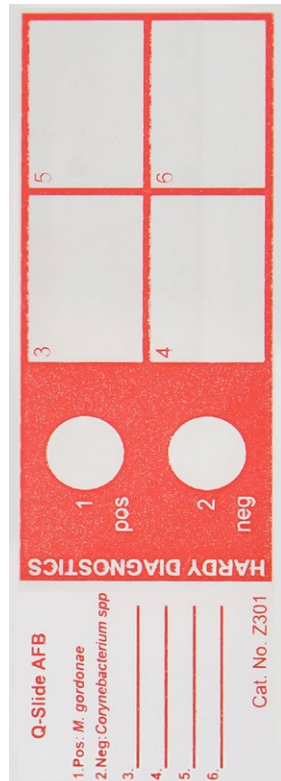
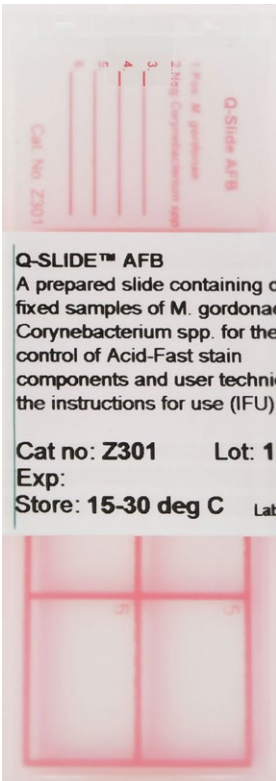
## Q-Slides™ AFB Control Slides

For easy QC of your stain and staining technique!

Used to test both the stain reagents and user technique. Can be used for Kinyoun, Ziehl-Neelsen, and fluorescent AFB stain methods. Slides are prepared and fixed with a known AFB positive and negative organism. There is also space for four test specimens.

- A convenient, easy to-use-format.
- Good dispersion of cells that stain deeply with excellent contrast.
- Large number of cells per viewing area at 1000X.
- Large area for patient specimens contained by hydrophobic lines.
- Plastic container protects and allows for easy manipulation of slides.
- White labeling area for patient identification.

5 slides per box.....Z301



# Digestion and Decontamination Reagents

## Phosphate Buffer

Bottle, 30ml, 2 oz polypropylene bottle,  
25/bx ..... X31

Bottle, 40ml, 2 oz polypropylene bottle,  
25/bx ..... X43

Bottle, 500ml, 500ml polycarbonate bottle,  
Each..... U10



## Sputum Digestion And Decontamination Reagents

Used to break down mucous components of sputum and other clinical specimens and to decontaminate the specimen of normal flora in order to culture slower growing mycobacteria.

### N-Acetyl-L-Cysteine (NALC)

Tube, 2.5gm, 16x100mm,  
20/bx ..... Z161

Tube, 250mg (prepares 50ml), 16x100mm,  
20/bx ..... Z60

### TB Base Digestant

Bottle, 50ml, 2 oz polyethylene bottle,  
25/bx ..... X45

Bottle, 100ml, 125ml polyethylene bottle,  
12/bx ..... U22

Bottle, 500ml, 500ml polypropylene bottle,  
each..... U20

## MucoGest™

MucoGest™ is composed of dithiothreitol, a mucolytic agent recommended for use in the digestion and decontamination procedures of sputum and other clinical specimens for the recovery of *Mycobacteria* spp. and fungi. Use MucoGest™ with TB Based Digestant (Cat. no. X45) for TB.

MucoGest™ 50, 0.25 gm (to make 50ml of solution), 20/pk.....Z130



# Lab Supplies

## Gloves

Adenna MIRACLE Gloves, nitrile, powder free, thin gauge exam, blue, extra-small, 2000/pk.....MIR160

Adenna MIRACLE Gloves, nitrile, powder free, thin gauge exam, blue, small, 2000/pk.....MIR162

Adenna MIRACLE Gloves, nitrile, powder free, thin gauge exam, blue, medium, 2000/pk.....MIR165

Adenna MIRACLE Gloves, nitrile, powder free, thin gauge exam, blue, large, 2000/pk.....MIR168



## Masks

Mask, Isolation, with ear loops, blue, 10/50 case/500 masks.....FEL110B

Mask, Isolation, with ear loops, yellow, 500/case.....15100

## ComfortPRO™ Lab Coats

Lab coat, 3 pockets, Blue, Medium, 20/pk ..... NEGU6073M

Lab coat, 3 pockets, Blue, Large, 20/pk .....NEGU6073L

Lab coat, 3 pockets, Blue, XLarge, 20/pk .....NEGU6073XL





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