Appendix A
Equipment and Consumables

Overview

Some additional equipment is needed for proper sample preparation for the Sherlock Mycobacteria Identification System. These items are listed in Table A-1 to aid in setting up and operating the laboratory. Most items should be readily available from your standard laboratory supplies providers.

Substitutions may be made for the recommended items, but you should assure that the materials are equivalent. Other items are nonessential, but may be useful to increase the ease of the procedure or to improve reproducibility.

Table A-1 Sherlock Additional Equipment (US sources)

ITEM	SOURCE	PART NUMBER
Extraction/Sample Preparation		
Brinkman Bottle-Top Dispenser .2-2ml	Fisher	13-688-226
Brinkman Bottle-Top Dispenser 100µl	Fisher	03-692-13
72-place tube holder (13mmx100 mm tube rack)	Fisher	14-793-14
Pasteur Pipette Bulb (24)	Fisher	13-678-9B
Pasteur Pipettes 5 ¾	Fisher	13-678-20B
Borosilicate Glass Tubes - Threaded End (13x100mm) - 1000 count	Fisher	14-959-35C
Phenolic Caps	Fisher	14-930-15D
Borosilicate Glass Tubes (13x100mm) - 1000 count	Fisher	14-961-27
Brinkman Eppendorf Series Pipetters 10µl - 100µl	Fisher	05-402-48
Brinkman Eppendorf Series Pipetters 10µl - 100µl Tips – 960 count	Fisher	21-371-3
Brinkman Eppendorf Series Pipetters 100µl – 1ml	Fisher	05-402-50
Brinkman Eppendorf Series Pipetters 100µl – 1ml Tips – 960 count	Fisher	21-372-4
Vial rack – 50 Spaces	Fisher	03-375-9
Multi-tube Vortexer (120 V)	VWR	58816-115
Pierce Reacti-therm Heating Module*	Pierce	18870
Pierce Reacti-vap Evaporator*	Pierce	18780
Pierce Reacti-Block S-1	Pierce	18816
Pierce Reacti-Block A-1 (Optional)	Pierce	18801
*Consult Vendor for Additional Size configurations		
OR		
Labconco Rapid-Vap Vacuum/vortex heat evaporator with lid heater and corrosion-proof vacuum pump	Labconco	79000-02
Labconco Sample Block	Labconco	74858-00

Table A-2 Sherlock Consumables Ordering Information

ITEM	SOURCE	PART NUMBER
Chemicals		
Methanol, case (HPLC Grade)	Fisher	A452-4
2-Propanol, case (HPLC Grade)	Fisher	A451-4
HCL (.5L) (ACS Grade)	Fisher	A144-500
Chloroform (1L) (HPLC Grade)	Fisher	C606-1
Potassium Hydroxide (KOH 500g) (ACS Grade)	Fisher	P250-500
Potassium Hydrogen Carbonate ($KHCO_3$ 500g) (ACS Grade)	Fisher	P184-500
4 - (Bromomethyl) – 6,7 dimethoxycoumarin (F.W. = 299.1)	Aldrich	30, 145-0
cis-dicyclohexyl-18-crown-6-ether (F.W. = 264.3)	Sigma	C5515
Glass/Plastic/Other		
2.0ml Amber Vials (1000 pack)	Restek	21143
250 µl Glass insert with spring (100 pack)	Restek	21776
2.0 ml Clear Vials (100 pack)	Restek	21154
Short Screw Caps with Liners (1000 pack)	Restek	24498
Purge Valve Frit (5)	Agilent	01018-22707
SB-C18 Zorbax Column 4.6mmx75mm 3.5µm pore size	Agilent	866953-902
SB-C18 Zorbax Guard Columns	Agilent	820950-920
Guard Column Hardware Kit	Agilent	820888-901
N_2 tank/regulator or Air tank/regulator	Local Vendor	
Gas Drying Unit	VWR	26668-007
Sterile Applicators (1000) for harvesting	Thomas Scientific	1132H05
MIDI Calibration Standard	MIDI	1500-A
MIDI Internal Standard	MIDI	1600-A
Media		
Middlebrook and Cohn 7H10 Agar (BD # 221174)	Fisher	B21174x
Lowenstein Jensen Slants (BD # 221388)	Fisher	BB21388
Quality Control Organisms		
Mycobacterium gordonae	ATCC	14470
Candida albicans	ATCC	60193