

Metabolic Profiling to Determine Bactericidal or Bacteriostatic Effects of New Natural Products using Isothermal Microcalorimetry

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Materials

Name	Company	Catalog Number	Comments
<i>Acinetobacter baumannii</i>	DSMZ	DSM-30008	reference strain used in this study
calPlate	Symcel	1220093	48-well plate for titanium cups to be inserted
calScreener	Symcel	1200001	isothermal microcalorimetry instrument
calView software	Symcel		collection and analysis software
calWell	Symcel	1901004	micro-bio grade (non-active) 48-well plate with plastic inserts which are inserted into the titanium cups
CASO agar	Carl Roth	X937.1	isolation and cultivation of microorganisms
Chloroamphenicol	Sigma-Aldrich	C0378	antibiotic
Ciprofloxacin	Sigma-Aldrich	17850	antibiotic
Cuvettes	Brand	759015	1.5 mL cuvettes
Disposable inoculation loops	Sarsted	86.1562.050	10 µL inoculation loops
Dimethylsulfoxid (DMSO)	Thermo Fisher Scientific	85190	
Eppendorf tubes	Eppendorf	30120086	1.5 mL eppendorf safe-lock tubes
Ethanol	Thermo Fisher Scientific	10428671	
Falcon Tubes	Sarsted	62.554.502	15 mL falcon tubes
Hydrochloride (HCL)	Thermo Fisher Scientific	10316380	
Methanol	Thermo Fisher Scientific	A412-500	
Mueller Hinton Broth	Sigma-Aldrich	70192	liquid medium for antibiotic susceptibility studies
Mueller Hinton Broth II cation adjusted media	Sigma-Aldrich	90922	Mueller Hinton Broth cation-adjusted to 1.25 mM CaCl ₂ , 0.8 mM MgCl ₂
Petri dishes	LABSOLUTE	7696404	

Pipette 100 - 1000 μ L	Brand	705880	
Pipette 2 - 20 μ L	Brand	705872	
Pipette 20 - 200 μ L	Brand	705878	
Pipette tips 100 - 1000 L	Brand	732032	
Pipette tips 2 - 200 μ L	Brand	732028	
Polymyxin B sulfate	Sigma-Aldrich	P0972	antibiotic
Rifampicin	Sigma-Aldrich	R3501	antibiotic
Serological pipette	Thermo Fisher Scientific	170356N	10 mL Nunc serological pipette
Spectrophotometer	Eppendorf AG	6135 000.017	
Sterile filters	Minisart	16534-----K	0.2 μ m pore size sterile filters
Syringe 50 mL	NORM-JECT	22778	
Tetracycline	Sigma-Aldrich	87128	antibiotic
Titanium cups	Symcel	1220089	inserted in 48-well titanium calPlate
Titanium lids	Symcel	1220091	screwed and tightend to the titanium cups
Trimethoprim	Sigma-Aldrich	T7883	antibiotic
Tweezers	Symcel	1900602	