

Materials List for:

A Purification and *In Vitro* Activity Assay for a (p)ppGpp Synthetase from *Clostridium difficile*

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Materials

Name	Company	Catalog Number	Comments
Inducible overexpression of a histidine-tagged protein			
Phusion polymerase	New England Biolabs (NEB)	M0530L	
QIAEX II DNA Gel Extraction Kit	Qiagen	20021	
KpnI restriction enzyme	NEB	R0142S	
PstI restriction enzyme	NEB	R0140S	
T4 DNA ligase	NEB	M0202	
NEB® 5-alpha Competent <i>E. coli</i> (High Efficiency)	NEB	C29871	
BL21 (DE3) Competent <i>E. coli</i>	NEB	C25271	
IPTG	Sigma-Aldrich	10724815001	
JXN-26 centrifuge with JLA 10.500 rotor	Beckman Coulter Avanti	-	
Microcentrifuge with D3024/ D3024R rotor	Scilogex	-	
MaxQ SHKE6000 Incubator	Thermo Scientific	-	
Ultrasonic processor	Sonics	VC-750	
Protein purification by nickel affinity chromatography			
Ni-NTA resin	G Biosciences	786-940/941	
Pierce Disposable Gravity columns, 10 mL	Thermo Scientific	29924	
1 mL Spectra/ Por float-A-lyzer G2 dialysis device (MWCO: 20-kD)	Spectrum	G235033	
Mini-Protean Electrophoresis Cell	BioRad	1658004	
Protein activity assay by thin layer chromatography			
Thin layer chromatograph (TLC) development tank	General Glass Blowing Company	80-3	
Polyethylenimine (PEI)-cellulose plates (20 cm x 20 cm, 100 µm thickness) with polyester support	Sigma-Aldrich	Z122882-25EA	
ATP, [γ - ³² P]- 3000 Ci/mmol 10mCi/ml lead, 100 µCi	Perkin Elmer	NEG002A	
Adenosine 5'-triphosphate (ATP) 100 mM	Bio Basic Canada	AB0311	
Guanosine-5'-diphosphate disodium salt (GDP)	Alfa Aesar	AAJ61646MC/E	
Storage phosphor screen	GE Healthcare Life Sciences	BAS-IP TR 2040 E Tritium Screen	

Storm 860 phosphorimager	GE Healthcare Life Sciences	-	
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