

Materials List for:

Measuring Microbial Mutation Rates with the Fluctuation Assay

Rok Krašovec¹, Huw Richards^{2,3}, Guillaume Gomez³, Danna R. Gifford¹, Adrien Mazoyer⁴, Christopher G. Knight³

¹School of Biological Sciences, The University of Manchester

²School of Science, University of Waikato

³School of Natural Sciences, The University of Manchester

⁴Department of Mathematics, Université du Québec à Montréal

Correspondence to: Rok Krašovec at rok.krasovec@manchester.ac.uk, Christopher G. Knight at chris.knight@manchester.ac.uk

URL: <https://www.jove.com/video/60406>

DOI: [doi:10.3791/60406](https://doi.org/10.3791/60406)

Materials

Name	Company	Catalog Number	Comments
1.5 mL Microcentrifuge tubes	Starlab International GmbH	S1615-5550	
2,3,5-Triphenyltetrazolium chloride	Sigma-Aldrich	T8877-10g	
6-well plates	Greiner Bio-One	REF 657102	
90 mm Petri Dishes Triple Vented	ThermoFisher Scientific	REF 120189	
96 deep-well plate (Masterblock 2 mL)	Greiner Bio-One	REF 780270	
Ammonium sulfate	Fisher Chemical	A/6440/53	
Bacto Agar	Becton, Dickinson and Company	REF 214010	
Bacto yeast extract	Becton, Dickinson and Company	REF 212750	
Cycloserine	Sigma-Aldrich	1158005-250MG	Only for assaying an alternative phenotypic marker
D-Glucose anhydrous	Fisher Chemical	G/0500/61	
50 mL Centrifuge Tube	Corning	REF 430828	
L-(+)-Arabinose	Sigma-Aldrich	A3256-500g	
Magnesium sulfate heptahydrate	Fisher Chemical	M/1050/53	
Nalidixic acid	Sigma-Aldrich	N8878-5G	Only for assaying an alternative phenotypic marker
Potassium phosphate dibasic trihydrate	Sigma-Aldrich	P5504-500g	
Potassium phosphate monobasic	Sigma-Aldrich	P0662-500g	
Rifampicin	EMD Millipore Corp, USA	557303-1GM	
Sodium chloride	Fisher Chemical	S/3160/60	
Spectrophotometer	Jenway	6320D	
Thiamine hydrochloride	Sigma-Aldrich	T4625-25g	
Trisodium citrate dihydrate	Sigma-Aldrich	S1804-500g	
Tryptone	Fisher Chemical	1278-7099	