Materials List for

Quantifying Food Intake in *Caenorhabditis elegans* by Measuring Bacterial Clearance

Christina Clark[*1,2,3], **Alan To**[*1,2,3], **Michael Petrascheck**[1,2,3]

[1]Department of Molecular and Cellular Biology, The Scripps Research Institute [2]Department of Molecular Medicine, The Scripps Research Institute
[3]Department of Neuroscience, The Scripps Research Institute

[*]These authors contributed equally

Corresponding Author

Michael Petrascheck
pscheck@scripps.edu

Citation

Clark, C., To, A., Petrascheck, M. Quantifying Food Intake in *Caenorhabditis elegans* by Measuring Bacterial Clearance. *J. Vis. Exp.* (204), e66422, doi:10.3791/66422 (2024).

Date Published

February 23, 2024

DOI

10.3791/66422

URL

jove.com/video/66422

Materials

Name	Company	Catalog Number	Comments
Amphotericin B	RPI	A40030-0.1	solvent: EtOH
Ampicillin	Fisher Scientific	BP176025	solvent: water
Bacto Peptone	BD Biosciences	211677	use to make NGM plates
Carbenicillin	Fisher Scientific	46-100-RG	solvent: water
Cell strainer	Fisher Scientific	22363547	40 µm to remove adults
Cholesterol	MP Biomedicals	02101380-CF	5 mg/mL stock
Difco, Agar, Bacteriological	BD Biosciences	214510	use to make NGM plates
Fluorodeoxyuridine	Sigma Aldrich	F0503	to sterilize worms on L4
Luria Broth	RPI	L24045-1000.0	open capsule, mix with 1 L of water, autoclave
M9 Buffer	Laboratory Prepared		Store in sterile conditions at room temperature To prepare 1 L: 15 g Na_2HPO_4*$12H_2O$ (FW: 358) 3 g KH_2PO4 (FW: 136) 5 g NaCl (FW: 58), 0.25 g $MgSO_4$*$7H_2O$ (FW: 246) autoclave
Microplate Sealer	Fisher Scientific	236707	
OP50	Caenorhabditis Genetics Center		
Plate 96-well	Falcon	351172	
Plate reader	Tecan	30016056	use 600 nm filter lens
Potassium Citrate, 1 M , pH 6	Laboratory Prepared		Store in sterile conditions at room temperature To prepare 1 L: 268.8 g Potassium citrate tribasic monohydrate (FW: 324) 26.3 g citric acid monohydrate (FW: 210) 900 mL of dH2O pH to 6 using 5 M KOH autoclave

Potassium Phosphate, 1 M , pH 6	Laboratory Prepared		Store in sterile conditions at room temperature To prepare 1 L: 136 g KH_2PO4 (FW: 136) 900 mL dH_2O pH to 6 using 5 M KOH autoclave
S-Basal	Laboratory Prepared		Store in sterile conditions at room temperature To prepare 1 L: 5.9 g NaCl (FW: 58) 50 mL 1 M potassium phosphate (pH 6) add 900 mL dH_2O autoclave, cool to 55 °C
S-Complete	Laboratory Prepared		Store in sterile conditions at room temperature To prepare 1 L: Add to 1 L of S-basal (cooled to 55 °C or RT) 10 mL of 1 M potassium citrate pH 6, 10 mL of trace metal solutions 3 mL of 1 M $CaCl_2$ 3 mL of 1 M $MgSO_4$
Serotonin hydrochloride	Thermo Scientific	AAB2126309	used at 5 mM
Sodium Chloride	Sigma Aldrich	S7653-5KG	to make buffers and NGM plates
Terrific Broth	Thermo Scientific	J75856-A1	12.5 g in 250 mL of water, autoclave
Titer plate Shaker	Thermo Scientific	88880023	shaken at 800 rpm, depends on shaker
Trace Metals Solution	Laboratory Prepared		Store in sterile conditions at room temperature To prepare 1 L: 1.86 g Na_2EDTA (FW: 372.24) 0.69 g $FeSO_4*7H_2O$ (FW: 278) 0.20 g $MnCl_2*4H_2O$ (FW: 198) 0.29 g $ZnSO_4*7H_2O$ (FW: 287) 0.016 g $CuSO_4$ (FW: 158) autoclave wrap in aluminum foil to keep in the dark