

Bacteriophage Effectiveness for Biocontrol of Foodborne Pathogens Evaluated via High-Throughput Settings

 Yan D. Niu¹, Jae Eun Hyun¹, Nghi Nguyen¹
¹Department of Ecosystem and Public Health, Faculty of Veterinary Medicine, University of Calgary

Corresponding Author

 Yan D. Niu
 dongyan.niu@ucalgary.ca

Citation

 Niu, Y.D., Hyun, J.E., Nguyen, N. Bacteriophage Effectiveness for Biocontrol of Foodborne Pathogens Evaluated via High-Throughput Settings. *J. Vis. Exp.* (174), e62812, doi:10.3791/62812 (2021).

Date Published

August 19, 2021

DOI

10.3791/62812

URL

jove.com/video/62812

Materials

Name	Company	Catalog Number	Comments
Essential supplies, reagents, and equipment			
Inoculating loops	VWR	12000-806	
Magnesium sulfate heptahydrate	Sigma	1374361	MgSO ₄ ·7H ₂ O
Petri Dishes with Clear Lid	Fisher	FB0875713	Diameter: 100 mm, sterile
Phosphate-buffered saline (PBS)	Fisher	10010023	
Pipet-Lite LTS Pipette L-1000XLS+	METTLER TOLEDO	17014382	
Pipet-Lite LTS Pipette L-300XLS+	METTLER TOLEDO	17014405	
Pipet-Lite Multi Pipette L12-20XLS+	METTLER TOLEDO	17013808	
Pipet-Lite Pipette, Unv. SL-20XLS+	METTLER TOLEDO	17014412	
Pipette Tips RT LTS 1000µL FL 768A/8-low retention	METTLER TOLEDO	30389213	
Pipette Tips SR LTS 20µL F 960A/5	METTLER TOLEDO	17005860	
Pipette Tips SR LTS 300µL 768A/4	METTLER TOLEDO	17005867	no filter
Reservoir	METTLER TOLEDO	89094-662	
Sterile, clear, 96-well flat-bottom polystyrene microplates with lids	Fisher	168055	
Tryptic soy agar (TSA)	Sigma	105458-0500	
Tryptic soy broth (TSB)	Sigma	105459-0500	
T-Shaped Cell Spreaders	VWR	76299-566	
Instruments			
Analog Vortex Mixer	Fisher	02-215-414	
Compact Microbiological Incubators	Fisher	50125590H	
Magnetic Stirrer Hotplates	Fisher	13-889-335	
Polygon Stir Bars	Fisher	14-512-125	length: 20 mm
Synergy Neo2 Hybrid Multi-Mode Reader	Fisher	BTNEO2M	
Software			

SAS	SAS Institute	9.4	
-----	---------------	-----	--