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### Detection of Viruses from Bioaerosols Using Anion Exchange Resin

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Schaeffer, Joshua W.; Chandler, Jeffrey C.; Davidson, Margaret; Magzamen, Sheryl L.; Perez-Mendez, Alma; Reynolds, Stephen J.; Goodridge, Lawrence D.; Volckens, John; Franklin, Alan B.; Shriner, Susan A.; and Bisha, Bledar, "Detection of Viruses from Bioaerosols Using Anion Exchange Resin" (2018). *USDA National Wildlife Research Center - Staff Publications*. 2176.  
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Materials List for:

# Detection of Viruses from Bioaerosols Using Anion Exchange Resin

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URL: <https://www.jove.com/video/58111>

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## Materials

Name	Company	Catalog Number	Comments
<i>Escherichia coli</i> bacteriophage MS2 (ATCC 15597-B1)	American Type Culture Collection	ATCC 15597-B1	
FluMist Quadrivalent	AstraZeneca	Contact manufacturer	Viral constituents of this vaccine are subject to change on an annual basis
CFX96 Touch Real-Time PCR Detection System	Bio-Rad	1855195	
Primers and probes	Integrated DNA Technologies	NA	
0.2 µm sterile filter	NA	NA	
1 L pyrex bottles or equivalent	NA	NA	
1 mL pipet tips	NA	NA	
1 mL pipettor	NA	NA	
50 mL serological pipet	NA	NA	
PCR tubes	NA	NA	
Pipet-aid or equivalent	NA	NA	
QIAamp Viral RNA Mini Kit	Qiagen	52904	
QuantiTect Probe RT-PCR Kit	Qiagen	204443	
Amberlite IRA-900 chloride form	Sigma-Aldrich	216585-500G	
Phosphate buffered saline	Sigma-Aldrich	P5368-10PAK	
Water (molecular biology grade)	Sigma-Aldrich	W4502-1L	
Eppendorf DNA LoBind Microcentrifuge Tubes	ThermoFisher	13-698-791	
Falcon 50 mL Conical Centrifuge Tubes	ThermoFisher	14-432-22	
Falcon Polypropylene Centrifuge Tubes	ThermoFisher	05-538-62	
SuperScript III Platinum One-Step qRT-PCR Kit w/ROX	ThermoFisher	11745100	
SKC Biosampler 20 mL, 3-piece glass set	SKC Inc.	225-9593	
Vac-u-Go sample pumps	SKC Inc.	228-9695	
Collison nebulizer (6-jet)	BGI Inc.	NA	

HEPA capsule	PALL	12144	
Q-TRAK indoor air quality monitor 8554	TSI Inc.	NA	
Alnor velometer thermal anemometer AVM440-A	TSI Inc.	NA	
SidePak AM510 personal aerosol monitor	TSI Inc.	NA	
Bioaerosol chamber	NA	NA	