

Supporting information

Assessment of an Electropositive Granule Media filter for concentrating viruses from large volumes of coastal water

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10 **Figure legends**

11 **FigureS1 Standard curve (HRV).** Fluorescent amplification curves of qPCR for RNA
12 standards of HRV with concentrations of 1.18×10^7 copies/ μ l $\sim$ 1.18 copies/ μ l from left
13 to right (a), and the corresponding standard curve for HRV RNA ($Y = -3.359X + 40.050$).
14 The linear regression coefficient (r^2) is 0.999 (b). Water was used as a non-template
15 control.

16 **Figure S2Standard curve (HuNoV GII).** Fluorescent amplification curves of qPCR
17 for RNA standards of HuNoV GII with concentrations of 1.2×10^7 copies/ μ l $\sim$ 12
18 copies/ μ l from left to right (a), and the corresponding standard curve for HuNoV GII
19 RNA ($Y = -3.180X + 39.245$). The linear regression coefficient (r^2) is 0.991 (b). Water
20 was used as a non-template control.

21 **Figure S3 Standard curve (EnV).** Fluorescent amplification curves of qPCR for RNA
22 standards of EnV with concentrations of 5.88×10^7 copies/ μ l $\sim$ 5.88copies/ μ l from left to
23 right (a), and the corresponding standard curve for EnVs RNA ($Y = -3.002X + 37.989$).
24 The linear regression coefficient (r^2) is 0.998 (b). Water was used as a non-template
25 control (gray lines).

26 **Figure S4 Standard curve (AstV).**Fluorescent amplification curves of qPCR for RNA
27 standards of AstV with concentrations of 1.83×10^7 copies/ μ l $\sim$ 1.83copies/ μ l from left
28 to right (a), and the corresponding standard curve for AstV RNA ($Y = -3.571X + 42.941$).
29 The linear regression coefficient (r^2) is 0.990 (b). Water was used as a non-template
30 control (gray lines).

31 **FigureS5 Standard curve (HAdV).** Fluorescent amplification curves of qPCR for

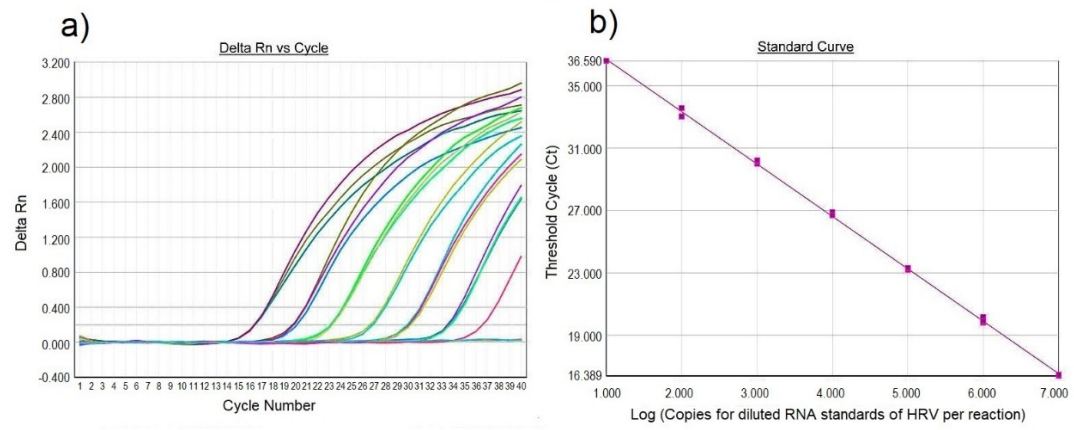
32 plasmid standards of HAdV with concentrations of 4.3×10^7 copies/ μ l $\sim$ 4.3 copies/ μ l
33 from left to right (a), and the corresponding standard curve for HAdV ($Y = -$
34 $3.566X + 44.258$). The linear regression coefficient (r^2) is 0.995 (b). Water was used as
35 a non-template control.

36 **Figure S6 Standard curve (HCV).** Fluorescent amplification curves of qPCR for
37 plasmid standards of HCV with concentrations of 2.3×10^7 copies/ μ l $\sim$ 2.3 copies/ μ l
38 from left to right (a), and the corresponding standard curve for HCV ($Y = -$
39 $3.263X + 47.251$). The linear regression coefficient (r^2) is 0.990 (b). Water was used as
40 a non-template control.

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42 **Table legends**

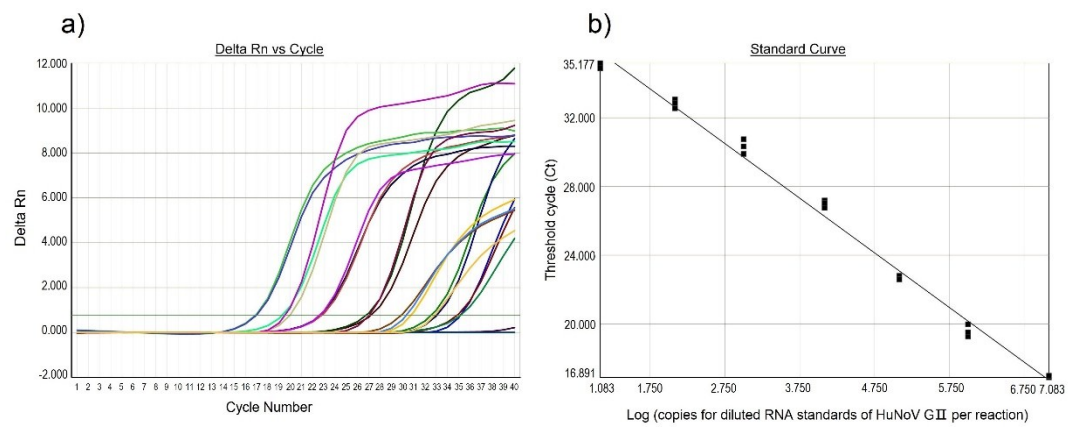
43 **Table S1.** Primers and probes used in this study



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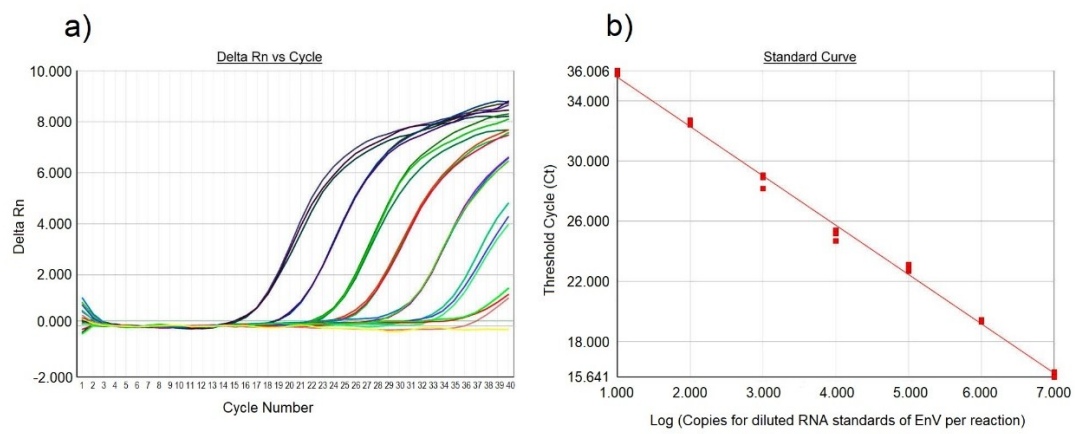
45 **Figure S1**

46



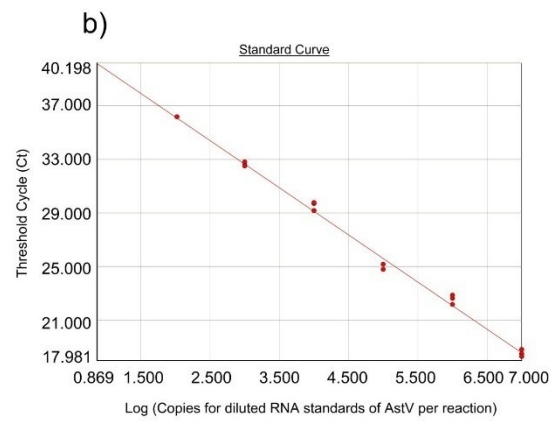
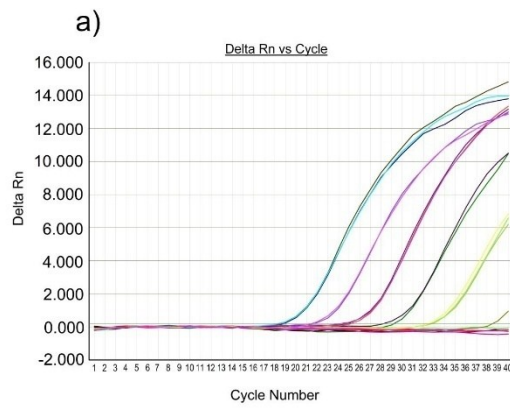
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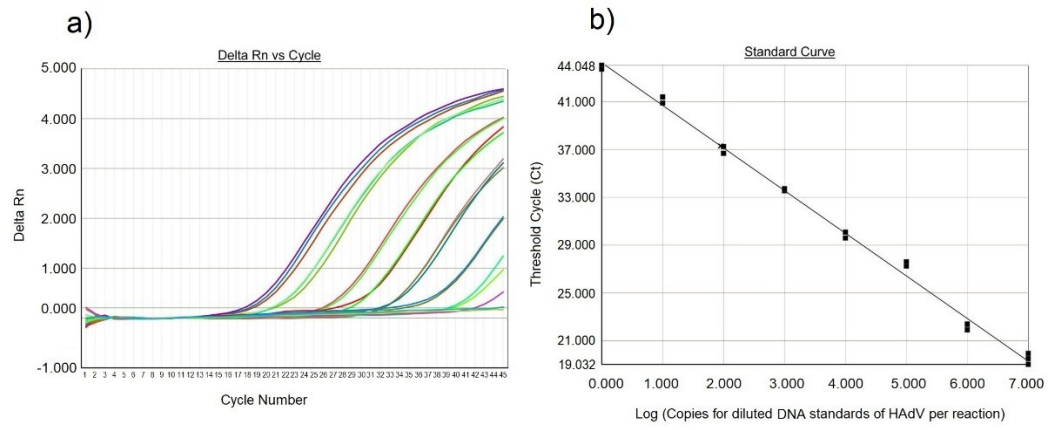
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50 **Figure S3**



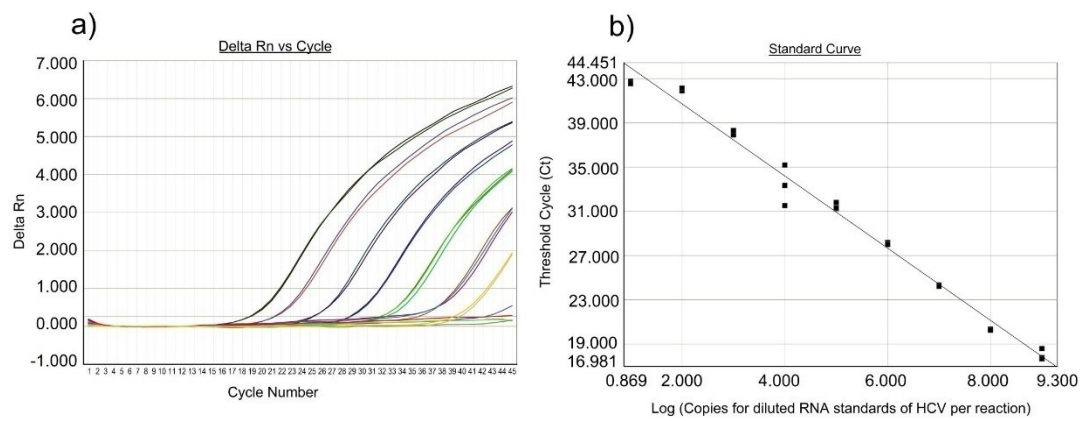
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52 **Figure S4**



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54 **Figure S5**



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56 **Figure S6**

57 **Table S1**

Targets	Primers or probes	Sequences(5'–3')	Product length (bp)	Reference
HRVs	RV-Pf	ACCATCTACACATGACCCTC	87	36
	RV-Pr	GGTCACATAACGCCCC		
	RV-TaqMan	FAM-ATGAGCACAATAGTTAAAAGCTAACACTGTCAA-TAMRA		
EnVs	EV-Pf	GATTGTCACCATAAGCAGC-	148	35
	EV-Pr	CCCCTGAATGCGGCTAATC		
	EV-TaqMan	FAM-CGGAACCGACTACTTTGGGTGTCCGT-BHQ1		
AstVs	AST-Q-F	CCGAGTAGGATCGAGGGT	90	34
	AST-Q-R	GCTTCTGATTAAATCAATTTTAA		
	AST- TaqMan	FAM-CTTTTCTGTCTCTGTTTAGATTATTTTAATCACC-TAMRA		
HuNoVs	COG-II-F	CARGARBCNATGTTYAGRTGGATGAG	98	33
	COG-II-R	TCGACGCCATCTTCATTCACA		
	RING2- TaqMan	FAM-TGGGAGGGCGATCGCAATCT-TAMRA		
HAdVs	EAdV- JTVXF	GGACGCCTCGGAGTACCTGAG	88	32
	EAdV- JTVXR	ACIGTGGGGTTTCTGAACTTGTT		
	EAdV-TaqMan	6-FAM-CTGGTGCAGTTCGCCCCGTGCCA-BHQ		
HCVs	CV-F2	ATGGCGTTAGTATGAGTGTCGT	223	37
	CV-R2	CAAGCACCCCTATCAGGCAGT		
	CV- TaqMan	FAM-CCATAGTGGTCTGCGGAACCGGT/139-161-TAMRA		