

TableS1 Sequences of primers and probes for real-time PCR**Norovirus Genotypes I (Kageyama et al. 2003)**

Name (Function*)	Sequence (5' → 3')	Tm	Final
COG1F(+)	CGYTGGATGCGNTTYCATGA	61.1	400nM
COG1R(-)	CTTAGACGCCATCATCATTYAC	56.3	400nM
RING1(a)-TP(P)	FAM-AGATYGCGATCYCCTGTCCA-TAMRA	61.7	300nM

Thermal conditions: 95°C 15sec → 56°C 60sec [85bp]

Norovirus Genotypes II (Kageyama et al. 2003)

Name (Function*)	Sequence (5' → 3')	Tm	Final
COG2F(+)	CARGARBCNATGTTYAGRTGGATGAG	65.6	400nM
COG2R(-)	TCGACGCCATCTTCATTCACA	61.1	400nM
RING2-TP(P)	FAM-TGGGAGGGCGATCGCAATCT-TAMRA	65.8	300nM

Thermal conditions: 95°C 15sec → 56°C 60sec [98bp]

Enterovirus (Katayama et al. 2002)

Name (Function*)	Sequence (5' → 3')	Tm	Final
Pan-Entero(+)	CCTCCGGCCCCCTGAATG	60.9	400nM
Pan-Entero(-)	ACCGGATGGCCAATCCAA	60.6	400nM
Pan-Entero(P)	FAM-CCGACTACTTTGGGTGTCCGTGTTTC-TAMRA	66.3	300nM

Thermal conditions: 95°C 15sec → 60°C 60sec [197bp]

Adenovirus for all serotypes (Heim et al. 2003)

Name (Function*)	Sequence (5' → 3')	Tm	Final
AQ1(+)	GCCCCAGTGGTCTTACATGCACATC	66.4	500nM
AQ2(-)	GCCACGGTGGGGTTTCTAAACTT	63.2	500nM
AP(P)	FAM-TGCACCAGACCCGGGCTCAGGTACTCCGA-TAMRA	78.1	400nM

Thermal conditions: 95°C 3sec → 55°C 10sec → 65°C 60sec [132bp]

Murine norovirus 1 (Kitajima M. unpublished)

Name (Function*)	Sequence (5'→3')	Tm	Final
MKMNVF(+)	CGGTGAAGTGCTTCTGAGGTT	58	400nM
MKMNVR(-)	GCAGCGTCAGTGCTGTCAA	58	400nM
MKMNVP(P)	FAM-CGAACCTACATGCGTCAG-MGB	68	300nM

Thermal conditions: 95°C 15s→56°C 60s [60bp]

F-specific RNA coliphage serogroup 3 (Ogorzaly et al. 2006)

Name (Function*)	Sequence (5'→3')	Tm	Final
FG3(+)	CCGCGTGGGGTAAATCC	-	400nM
FG3(-)	TTCTTACGATTGCGAGAAGGCT	-	400nM
FG3(P)	FAM-AAGCGGGTGCAGTT-MGB	-	300nM

Thermal conditions: 95°C 15s→60°C 60s [116bp]

* +; Forward primer, -; Reverse primer, P; Probe



Figure S1 Photo of Sampling (at Wastewater Treatment Plant)

Table S2 Detection of Viruses from the Wastewater Treatment Plant (Detail)

Sam pling Time	Sam pling Locaton	AdV copies/m ³ air	NV G I copies/m ³ air	NV G II copies/m ³ air	FG 3 copies/m ³ air	EV copies/m ³ air
Nov-07	A	+	+	3.2E+02	1.8E+02	-
	B	-	-	3.5E+01	-	-
	D	-	-	-	-	+
	E	-	-	-	-	+
	F	+	-	1.8E+02	1.7E+02	-
	G	NA	NA	NA	NA	NA
	H	NA	NA	NA	NA	NA
	Dec-07	A	-	+	1.8E+02	-
B		-	-	3.0E+02	-	+
D		-	-	-	-	-
E		-	-	-	-	-
F		9.6E+01	4.0E+01	3.1E+03	+	-
G		-	2.3E+01	8.1E+02	-	-
H		NA	NA	NA	NA	NA
Jan-08		A	4.0E+02	-	-	-
	B	-	-	-	-	-
	D	NA	NA	NA	NA	NA
	E	NA	NA	NA	NA	NA
	F	-	+	4.0E+02	-	-
	G	-	-	-	-	-
	H	-	+	6.3E+02	-	-

-: Not Detected, +: Detected, NA: Not Analyzed

NV G I: Norovirus Genogroup I NV G II: Norovirus Genogroup II AdV: Adenovirus (all serotypes), FG 3: F+ specific RNA Coliphage serotype 3