

Table 2. Panel of 23 non-H7 influenza viruses (A) and 18 non-influenza respiratory pathogens (B) used to determine the analytical specificity of the H7 rRT-PCR assay.

(A)

Subtype	Virus
H1N1	A/duck/Alberta/35/76
H2N3	A/duck/Germany/1215/73
H3N8	A/duck/Ukraine/1/63
H4N6	A/duck/Czechoslovakia/56
H6N2	A/turkey/Massachusetts/3740/65
H8N4	A/turkey/Ontario/6118/68
H9N2	A/turkey/Wisconsin/1/66
H10N7	A/chicken/Germany/N/49
H11N6	A/duck/England/56
H12N5	A/duck/Alberta/60/76
H13N6	A/gull/Maryland/704/77
H14N5	A/mallard/Gurjev/263/82
H15N8	A/duck/Australia/341/83
H5N1	A/blow fly/Kyoto/93/2004
H5N1	A/whooper swan/Hokkaido/4/2011
H5N2	A/chicken/Ibaraki/1/2005
H1N1pdm09	A/Narita/1/2009
H1N1pdm09	A/California/07/2009
H1N1pdm09	A/Tokyo/F11-006/2011
H1N1	A/Brisbane/59/2007
H3N2	A/Uruguay/716/2007
H3N2	A/Tokyo/F13-005/2013
TypeB	B/Florida/04/2006

(B)

Pathogen
Respiratory syncytial virus A
Respiratory syncytial virus B
Human parainfluenza virus type 2
Human parainfluenza virus type 3
Human parainfluenza virus type 4a
Human parainfluenza virus type 4b
Human rhinoviruses type A
Human rhinoviruses type B
Human metapneumovirus type A1
Human metapneumovirus type B2
Human coronavirus OC43
Human coronavirus 229E
Human coronavirus NL63
Human coronavirus HKU1
Human bocavirus
Human enterovirus
Human adenovirus 2
Human adenovirus 4

Table 3. Number of positive results and average Cp values of the established H7 rRT-PCR assay and existing Type A rRT-PCR assay in detecting 8 Eurasian H7 influenza viruses. Cp values were analyzed using the Second Derivative Maximum Method in Light Cycler® 480 SW1.5 software.

Virus	Subtype	M gene (copies/mL)	Dilution of Virus	M gene real-time RT-PCR			H7 gene real-time RT-PCR		
				No. of positive results	Average Cp value	SD	No. of positive results	Average Cp value	SD
A/Anhui/1/2013	H7N9	2.21×10 ¹¹	10 ⁴	3	31.65	0.05	3	30.60	0.05
			10 ⁷	3	34.89	0.17	3	33.89	0.12
			10 ⁸	3	37.03	0.20	3	37.07	0.55
A/duck/Fukui/1/2004	H7N7	1.49×10 ¹⁰	10 ⁴	3	28.84	0.02	3	28.10	0.03
			10 ⁷	3	32.39	0.09	3	31.51	0.16
			10 ⁸	3	35.57	0.32	3	34.88	0.18
A/quail/Aichi/1/2009	H7N6	8.21×10 ¹⁰	10 ⁵	3	29.67	0.01	3	36.46	0.34
			10 ⁶	3	33.12	0.04	2	38.86	-
			10 ⁷	3	35.70	0.21	0	-	-
A/mallard/Netherlands/12/2000	H7N3	2.86×10 ¹⁰	10 ⁵	3	31.31	0.10	3	30.69	0.07
			10 ⁶	3	34.60	0.25	3	33.72	0.26
			10 ⁷	3	36.85	0.14	3	37.31	0.85
A/Netherlands/33/2003	H7N7	4.46×10 ¹⁰	10 ⁵	3	30.72	0.06	3	30.51	0.09
			10 ⁶	3	33.94	0.12	3	33.67	0.26
			10 ⁷	3	36.21	0.21	3	36.36	0.63
A/duck/Gunma/466/2011	H7N9	7.74×10 ¹⁰	10 ⁵	3	29.84	0.02	3	29.12	0.04
			10 ⁶	3	33.18	0.10	3	32.44	0.07
			10 ⁷	3	35.82	0.13	3	35.17	0.32
A/duck/Hong Kong/301/1978	H7N2	9.56×10 ⁹	10 ⁴	3	29.90	0.02	3	29.96	0.09
			10 ⁵	3	33.14	0.13	3	33.28	0.25
			10 ⁶	3	35.82	0.22	3	35.80	0.26
A/duck/Hong Kong/293/1978	H7N2	1.35×10 ¹¹	10 ⁶	3	28.84	0.02	3	28.39	0.11
			10 ⁶	3	32.12	0.04	3	31.65	0.09
			10 ⁷	3	35.11	0.11	3	34.87	0.25

Fig.1.

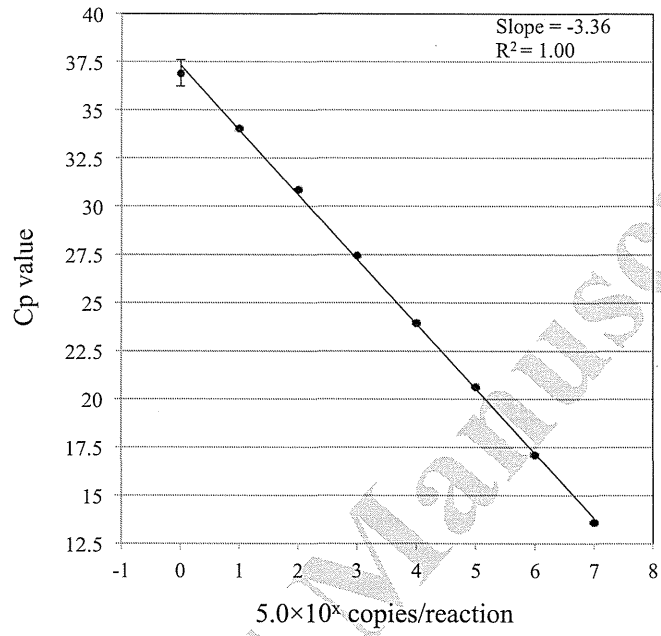


Fig.2.

