

Additional file

Table 7. Target genes used for the primer design of the RespiFinder® 2SMART assay.

Target	Gene
Flu A	Matrix protein (M1) gene
Flu B	M1 gene
Flu A H1N1 pdm09	Neuraminidase gene
hMPV	Nucleocapsid protein (NP) gene
hAdV	Hexon (H) gene
hPIV-1	Haemagglutinin-neuraminidase (HN) gene
hPIV-2	HN gene
hPIV-3	HN gene
hPIV-4	Major NP gene
RhV/EnV	5' untranslated region polyprotein (PP) gene
RSV-A	Nonstructural protein gene
RSV-B	Nucleoprotein gene
hCoV-NL63	NP gene
hCoV-OC43	NP gene
hCoV-229E	NP gene
hCoV-HKU1	Nucleocapsid phosphoprotein (N) gene
hBoV	NP-1 gene
<i>B. pertussis</i>	Insertion sequence 481
<i>L. pneumophila</i>	Macrophage infectivity potentiator (MIP) gene
<i>M. pneumoniae</i>	Cytadhesin protein (P1) gene
<i>C. pneumoniae</i>	Major outer membrane protein gene
Amplification control 1	Unique artificial sequence (UAS)
Amplification control 2	UAS

Table 8. Targets and corresponding temperature values of smart probes used in the RespiFinder®

2SMART assay.

2SAMRT reaction	Label	Smart probe	Pathogen	Average Tm (°C)	Tm range ARTIs)
1	ROX	Probe 1	RSV-A	55	53.5-56.5
		Probe 2	hAdV	59.5	58-61
		Probe 3	hMPV	64	62.5-65.5
		Probe 4	RSV-B	68	66.5-69.5
		Probe 5	Inf-A	74	72.5-75.5
		Probe 6	Inf-B	78	76.5-79.5
	Cy5	Probe 1	<i>L. pneumophila</i>	51.5	49.5-53.5
		Probe 2	<i>B. pertussis</i>	56.5	55-58
		Probe 3	Rh/EnV	62	60.5-63.5
		Probe 4	<i>C. pneumoniae</i>	68	66.5-69.5
		Probe 5	<i>M. pneumoniae</i>	72	70.5-73.5
	FAM	Probe 1	Amplification control 1	63	61-65
2	ROX	Probe 1	hPIV-1	55	53.5-56.5
		Probe 2	hPIV-2	59.5	58-61
		Probe 3	hPIV-3	64	62.5-65.5
		Probe 4	hPIV-4	68	66.5-69.5
		Probe 5	hBoV-1	74	72.5-75.5
	Cy5	Probe 1	hCoV-OC43	51.5	49.5-53.5
		Probe 2	hCoV-NL63/HKU1	54	52.5-55.5
		Probe 3	hCoV-229E	61	58.5-63.5
		Probe 6	Inf-A H1N1 pdm09	77.5	76-79
	FAM	Probe 1	Amplification control 2	57.5	55.5-59.5