

Supplementary Table S1. Primers and probes used to detect influenza virus (IFV), RSV, hMPV, HRV, HPIV, HAdV, HCoV and SARS-CoV-2.

	Virus	Primer/Probe name	Nucleotide sequence 5'→3'	Target gene	Reference
Assay 1	GAPDH	GAPDH-F	GTGAAGGTCGGAGTSAACGG	GAPDH	[1]
		GAPDH-R	TCAATGAAGGGGTCATTGATGG	GAPDH	
		GAPDH-P (Probe)	HEX-CGCCTGGTCA ~~C~~ CAGGGCTGC-BHQ1	GAPDH	
	Influenza A	FluA-M-F151	CATGGARTGGCTAAAGACAAGACC	M	
		FluA-M-R276	AGGGCATTTTGGACAAAKCGTCTA	M	
		FluA-M-P218	FAM-ACGCTCACCGTGCCAGT-BHQ1	M	
	Influenza B	FluB-MF439	CTCTGTGCTTTRTGCGARAAAC	M	
		FluB-MR	CCTTCYCCATTCTTTTGACTTGC	M	
		FluB-P135	Cy5-TCAGCAATGAACACAGCAA-BHQ3	M	
Assay 2	RSV	RSV_F3251	GGCAAATATGGAAACATACGTGAA	M	[2]
		RSV_R3334	TCTTTTCTAGGACATTGTAYTGAACAG	M	
		RSV_P3303	FAM-CTGTGTATGTGGAGCCTTCGTGAAGCT-BHQ1	M	
	hMPV	hMPV_F3604	CAARTGYGACATTGCTGAYCTRAA	F	
		hMPV_R3683	ACTGCCGCACAACATTTAGRAA	F	
Assay 3	HRV	hMPV_P3630	JOE-TGGCYGTYAGCTTCAGTCARTTC-BHQ1	F	
		qPCR/HRV_F	GACAWGGTGTGAAGAGYC	5'UTR	[3]
		qPCR/HRV_R	CAAAGTAGTYGGTYCCRTCC	5'UTR	
		qPCR/HRV_P	FAM-TCCTCCGCCCCCTGAAT-3IABkFQ	5'UTR	
Assay 4	HPIV1	PIV1_F2	AAAAACTTAGGGTTAAAGACAATCCA	HN	[4]
		PIV1_R2_N	GCCAGATGTRTRTCTTCCTGCTGGT	HN	
		PIV1-P-N (Probe)	HEX-AAACGATGGCTGAAAAAGGGAA-BHQ1	HN	
	HPIV2	PIV2_F2_N	CCATYTACCTAAGTGATGGAA	HN	
		PIV2_R_N	TGGCATAATCTTCTTTYTCAG	HN	
		PIV2-P (Probe)	FAM-AATCGCAAAAGCTGTTCAGTCAC-BHQ1	HN	
	HPIV3	PIV3_F2	CAGGAAGCATTGTRTCATCTGT	HN	
		PIV3_R2_N	ATAGTGTGTAATGCAGCTTGT	HN	
		PIV3-P (Probe)	FAM-ACCCAGTCATAACTTACTCAACAGCAAC-BHQ1	HN	
	HPIV4	PIV4_F1	CAAAYGATCCACAGCAAAGATTC	N	
		PIV4_R_N	ATGTGGCCTGYAARGAAAGCA	N	
		PIV4_P_N (Probe)	HEX-GTATCATCATCTGCCAAATCRGCAATTAAACA-BHQ1	N	
Assay 5	HAdV	qPCR/HAdV_F	GTAGACTTGCARGACAGAAACAC	Hexon	[5]
		qPCR/HAdV_R1	AAYRCGAACATCRGGATCCTAAC	Hexon	
		qPCR/HAdV_R2	TGATTCTAACATCDGGATCATAGC	Hexon	
		qPCR/HAdV_Probe	5' FAM-ATGTGGAABCAGGCTGTTGAC-3' MGB-NFQ	Hexon	
Assay 6	HCoV-229E	qPCR/229E_F	ACTTTGTCTAGTTCGTATGCTAAAC	ORF1ab	[6]
		qPCR/229E_R	TTGTCAGAACATTGGCATTAAACA	ORF1ab	
		qPCR/229E_Probe	FAM-ATTATCAGCTTATGACTTGGCGTGT-BHQ1	ORF1ab	
	HCoV-OC43	qPCR/OC43_F	ATTATCAGCTTATGACTTGGCGTGT	ORF1ab	

		qPCR/OC43_R	TCTGGACCACTATTAACAACCTG	ORF1ab	
		qPCR/OC43_Probe	HEX-TTGCAAAATAATGAATTAATGCCTGCTAAGTTGA-BHQ1	ORF1ab	
	HCoV-NL63	qPCR/NL63_F	GTCTCTTATAGGTGGCATGGT	ORF1ab	
		qPCR/NL63_R	GAAGCACATCAGTTTGTAAGCA	ORF1ab	
		qPCR/NL63_Probe	HEX-CCTTTTCTTTGGCACTGCAAGCAC-BHQ1	ORF1ab	
	HCoV-HKU1	qPCR/HKU1_F	AGTTTATCTTTAGTTGATGTTGGGA	ORF1ab	
		qPCR/HKU1_R	GATTTAAGTGGCGTGACAATTCAT	ORF1ab	
		qPCR/HKU1_Probe	FAM-TATTTGACAGGTTGTGATTATGTTGTTGGG-BHQ1	ORF1ab	
Assay 7	SARS-CoV-2	N1_F 28286-28305	GACCCCAAAATCAGCGAAAT	N	[7]
		N1_R 28334-28357	TCTGGTTACTGCCAGTTGAATCTG	N	
		N1_Probe	FAM-ACC CCG CAT TAC GTT TGG TGG ACC-BHQ1	N	
		N2_F 29163-29182	TTA CAA ACA TTG GCC GCA AA	N	
		N2_R 29212-29229	GCG CGA CAT TCC GAA GAA	N	
		N2_Probe	FAM-ACA ATT TGC CCC CAG CGC TTC AG-BHQ1	N	

Abbreviations: GAPDH; glyceraldehyde 3-phosphate dehydrogenase, M; matrix gene, F; fusion gene, 5'UTR; 5' untranslated region, N; nucleocapsid gene, HN; hemagglutinin-neuraminidase gene

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