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Diagnosing the novel SARS-CoV-2 by quantitative RT-PCR: variations and opportunities

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Suppl. Fig. 1. Partial sequence alignment of the new coronavirus (SARS-CoV2) genome deposited at the GenBank. (A) Partial alignment of the N gene. (B) Partial alignment of the ORF1ab sequence. The colors blue, red and green of the lines correspond to the forward and reverse primers and the probe, respectively, as recommended by the CDC/China.

Α		
	GGGGAACTTCTCCTGCTAGAAT	
SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil		630 630 630 630 630 630 630 630 630
	TTGCTGCTGCTTGACAGATT CAGACATTTTGCTCTC	
SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil	: GCTGGCAATGGCGGTGATGCTGCTCTTGCTGCTGCTGCTGACAGATTGAACCAGCTTGAGAGCAAAA :	700 700 700 700 700
SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - USA SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil	AAGCTG : TGTCTGGTAAAGGCCAACAACAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAAGAGCCAAACTGTCACTAAGAAATCTGCTGCTGCTGAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGCTGAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGCAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGGCGAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAACAAGGCCAAACTGTCACTAAGAAATCTGCTGCTGAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAACAACAACAACAGGCCAAACTGTCACTAAGAAATCTGCTGCTGCAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAACAACAACAACGCCAAACTGTCACTAAGAAATCTGCTGCTGCAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAACAACAACAACGCCAAACTGTCACTAAGAAATCTGCTGCTGCAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAACAACAACGCCAAACTGTCACTAAGAAATCTGCTGCTGCAGGCTTCTAAGAA : TGTCTGGTAAAGGCCAACAACAACAACAACGCCAAACTGTCACTAAGAAATCTGCTGCTGCAGGCTTCTAAGAA	770 770 770 770 770 770 770 770 770 770
SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Taiwan SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil	 GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTCGGCAGACGTGGTCCAGAA GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTCGGCAGACGTGGTCCAGAA GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA GCCTCGGCAAAAACGTACTGCCACTAAAGCATACAATGTAACACAAGCTTTCGGCAGACGTGGTCCAGAA 	840 840 840 840 840 840 840

B

		CCCTGTGGGTTTTA
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	 GGATTTTGTGACTTAAAAGGTAAGTATGTACAAATACCTACAACTTGTGCTAAT 	GACCCTGTGGGTTTTA : 13090 GACCCTGTGGGTTTTA : 13090 GGACCCTGTGGGTTTTA : 13090 GGACCTGTGGGTTTTA : 13090 GGACCTGTGGGTTTTA : 13090 GGACCTGTGGGTTTTA : 13090
	CACTTAA CCGTCTGCGGTATGTGGAAAGGTTATGG	
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Vepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Taiwan SARS-CoV2 - India SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAAACACAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACCAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACCAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACCAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA CACTTAAAAACCAGTCTGTACCGTCTGCGGTATGTGGAAAGGTTATGGCTGTA	GTTGTGATCAACTCCG : 13160 GGTTGTGATCAACTCCG : 13160
	ACGATTGTGCATCAGCTGA	
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Uith Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Spain SARS-CoV2 - Paristan		GTAAGTGCAGCCGTC : 13230 'GTAAGTGCAGCCGTC : 13230 'GTAAGTGCAGCCCGTC : 13230
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Uiet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Spain SARS-CoV2 - Paristan	 TTACACCGTGCGGCACAGGCACTAGTACTGATGTCGTATACAGGCTTTTGACA TTACACCGTGCGGCACAGGCACTAGTACTGATGTCGTATACAGGGCTTTTGACA TTACACCGTGCGGCACAGGCACTAGTACTGATACGATGTCGTATACAGGGCTTTTGACA 	TCTACAATGATAAAGT : 13300

Suppl. Fig. 2. Partial sequence alignment of the new coronavirus (SARS-CoV2) genome deposited at the GenBank. (A) Partial alignment of the E gene. (B) Partial alignment of the RdRp gene. The colors blue, red and green of the lines correspond to the forward and reverse primers and the probe, respectively, as recommended by the Institut Pasteur /France.

Α	
	ACAGGTACGTTAATAGTTAATAGCGT
SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - Spain SARS-CoV2 - Spain SARS-CoV2 - Brazil	 ATGTACTCATTCGTTTCGGAAGAGACAGGTACGTTAATAGTTAATAGCGTACTTCTTTTTTTT
	ACACTAGCCATCCTTACTGCGCTTCG ATATTGCAGCAGTACGCACACA
SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Spain	: TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTTCGATTGTGTGCGTACTGCTGCAATATTGT: 140: TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTTCGATTGTGTGCGCGTACTGCTGCAATATTGT: 140: TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCATCGTGCGTACTGCGGCACTGCTGCAATATTGT: 140: TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTTCGATTGTGTGCGTACTGCTGCAATATTGT: 140
SARS-CoV2 – Japan SARS-CoV2 – South Korea SARS-CoV2 – Nepal	: TAACGTGAGTCTTGTAAAACCTTCTTTTACGTTACGTTA
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - Viet Nam SARS-CoV2 - Viet Nam SARS-CoV2 - Taiwan SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Sweden SARS-CoV2 - Brazil SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	

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SARS-CoV2 SARS-CoV2



 Suppl. Fig. 3. Partial sequence alignment of the new coronavirus (SARS-CoV2) genome deposited at the GenBank. (A) Partial alignment of the E gene. (B) Partial alignment of the RdRp gene. The colors blue, red and green of the lines correspond to the forward and reverse primers and the probe, respectively, as recommended by Charité - Universitätsmedizin Berlin/Germany.

A

	ACAGGTACGTTAATAGTTAATAGCGT			
	ATGTACTCATTCGTTTCGGAAGAGACAGGTACGTTAATAGTTAATAGCGTACTTCTTTTTTCTGCTTTCG : 70 ATGTACTCATTCGTTTCGGAAGAGACAGGTACGTTAATAGTTAATAGCGTACTTCTTTTTTTCTGCTTTCG : 70 ATGTACTCATTCGTTTCGGAAGACAGGTACGTTAATAGTTAATAGCGTACTTCTTTTTTTCTGCTTTCG : 70 ATGTACTCATTCGTTTCGGAAGACAGGTACGTTAATAGTTAATAGCGTACTTCTTTTTTTT			
	ACACTAGCCATCCTTACTGCGCTTCG ATATTGCAGCAGTACGCACACA			
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Viet Nam SARS-CoV2 - Taiwan SARS-CoV2 - Taiwan SARS-CoV2 - India SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Sweden SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTTCGATTGTGTGCGTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTTCGATTGTGTGCGCTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCACGATCGTTGCGGCGTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTCGATGTGTGGCGTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTCGATGTGTGGCGTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTTCGATGTGTGGCGTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTTCGATTGTGTGCGCTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTTCGATTGTGTGCGCTACTGCTGCCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTTCGATTGTGTGCGCTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTTCGATTGTGTGCGCTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTTAGCCATCCTTACTGCGCTTCGCTGCATGTGTGCGGCACGCTGCCGCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTCGCATGTGTGGCGTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTTACACTAGCCATCCTTACTGCGCTCGCATGTGTGGCGTACTGCTGCAATATTGT : 140 TGGTATTCTTGCTAGTAGCAATCCTTACTGCGCTTCGCTGCGCTGCGATATTGT : 140 TGGTATTCTTGCTAGTAGCAATCCTTACTGCGCTCTGCTGCATGCTGCGCAACTGCTGCCGCAATATTGT : 140 TGGTATTCTTGCTAGTAGCAATCCTTACTGCGCTCCTACTGCGCACGCTGCGCACTGCTGCGCAACTGCTGCGCAATATTGT : 140			
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - UisA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Syain SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	TAACGTGAGTCTTGTAAAAACCTTCTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTTACGTTTACCTCGGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTTACGTTTACCTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTTACGTTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTACGTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTACGTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTACGTTACTCTCGTGTTAAAAATCTGAATTCTCTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTACGTTACTCTCGTGTTAAAAATCTGAATTCTCTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTACGTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTACGTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTACGTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTACGTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210TAACGTGAGTCTTGTAAAACCTTCTTTTACGTTACTCTCGTGTTAAAAATCTGAATTCTTCTAGAGTT: 210			
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Talwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan				

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B

		GTGARATGGTCATGTGTGGCGG
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Such Korea SARS-CoV2 - USA SARS-CoV2 - Uset Nam SARS-CoV2 - Viet Nam SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Spain SARS-CoV2 - Paxil SARS-CoV2 - Pakistan	 CACACCGTTTCTATAGATTAGCTAATGAGTGTGCTCAAGTATTG CACACCGTTTCTATAGATTAGCTAATGAGTGTGCTCAAGTATTG CACACCGTTTCTATAGATTAGCTAATGAGTGGTGCTCAAGTATTG CACACCGTTTCTATAGATTAGCTAATGAGTGGCTCAAGTATTG 	AGTGAAATGGTCATGTGTGGGGGGTTC : 15190 AGTGAAATGGTCATGTGGGGGGTTC : 15190 AGTGAAATGGTCATGTGTGGGGGTTC : 15190 AGTGAAATGGTCATGTGTGGGGGGTTC : 15190
	CCAGGTGGWACRTCATCMGGTGATGC CAGGTGGAACCTCATCAGGAGATGC	CARATGTTAAASACACTATTA
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - South Korea SARS-CoV2 - USA SARS-CoV2 - Uset Nam SARS-CoV2 - Australia SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	: АСТАТАТСТТАААССАССТСВСТАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВСААССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАСАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАСАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАСССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА АСТАТАТСТТАААССАССТСВАССТСАТСАСВАСАТСССАСАА	CTGCTTATGCTAATAGTGTTTTTAAC : 15260 CTGCTTATGCTAATAGTGTTTTTAAC : 15260
	GCATA	
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - USA SARS-COV2 - USA SARS-COV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Spain SARS-CoV2 - Parail SARS-CoV2 - Pakistan	ATTGTCAACCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC ATTTGTCAAGCTGTCACGGCCAATGTTAATGCACTTTTATCTAC	TGATGGTAACAAAATTGCCGATAAGT : 15330
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	A IGTCCGCAATTTACAACACAGACTTTATGAGTGTCTCTATAGA A IGTCCGCAATTTACAACACAGACTTTATGAGTGTCTCTATAGA A GTCCGCAATTTACAACACAGACTTTATGAGTGTCTCTATAGA A IGTCCGCAATTTACAACACAGACTTTATGAGTGTCTCTATAGA A IGTCCGCAATTTACAACACAGACTTTATGAGTGTCTCTATAGA	AATAGAGATGTTGACACAGACTTTGT : 15400

Suppl. Fig. 4. Partial sequence alignment of the new coronavirus (SARS-CoV2) genome deposited at the GenBank. (A) Partial alignment of the N gene. (B) Partial alignment of the NSP14gene. The colors blue, red and green of the lines correspond to the forward and reverse primers and the probe, respectively, as recommended by the University of Hong Kong.

Α		
SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Spain	TAATCAGACAAGGAACTGATTA CCGCAAA CAAACCCAAGGAAATTTTGGGGACCAGGAACTAATCAGACAAGGAACTGATTACAAACATTGGCCGCAAA 910 CAAACCCAAGGAAATTTTGGGGACCAGGAACTAATCAGACAAGGAACTGATTACAAACATTGGCCGCAAA 911 CAAACCCAAGGAAATTTTG	0 0 0 0 0 0 0 0 0 0 0 0 0
SARS-CoV2 - Japan SARS-CoV2 - Nepal SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - USA SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Spain	TTGCACAATTIGC CCAAGGTGTACTCCAT TTGCACAATTTGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC 980 TTGCACAATTTGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC 981 TTGCACAATTTGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC 986 TTGCACAATTTGCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC 986 TTGCACAATTTGCCCCAGCGCCTTCAGCGGTTCTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC	
SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden	G GGGAACGTGGTTGACCTACACAGGTGCCATCAAATTGGATGACAAAGATCCAAATTTCAAAGATCAAGGT : 1050 GGGAACGTGGTTGACCTACACAGGTGCCATCAAATTGGATGACAAAGATCCAAATTTCAAAGATCAAGTC : 1050 GGGAACGTGGTTGACCTACACAGGTGCCATCAAATTGGATGACAAAGATCCAAATTTCAAAGATCAAG	0 0 0 0 0 0 0 0 0 0 0 0
SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain		0 0 0 0 0 0 0 0 0 0 0 0 0

В

TGGGGYTTTACRGGTAACCT

	IGGGGIIIIACKGGIAACCI
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - India SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	:TCTATAATCCGTTTATGATGATGTTCAACAATGGGGTTTTACAGGTAACCTACAAAGCAACCATGATCT:18550::CCTATAATCCGTTATGATGTCAACAATGGGGTTTTACAGGTAACCTACAAAGCAACCATGATCT::18550::CCTATAATCCGTTATGATGTCAACAATGGGGTTTTACAGGTAACCTACAAAGCAACCATGATCT::18550::<
	TAGTTGTGATGCWATCATGACTAG
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Australia SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Taiwan SARS-CoV2 - India SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Sweden SARS-CoV2 - Brain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	:GTATTGTCAAGTCCATGGTAATGCACATGTAGCTAGCTAG
	AACRCGCTTAACAAAGCACTC CACGAGTGCTTTGTTAAGCGTGTGACTGGACTATTGAATATCCTATAATTGGTGATGAACTGAAGATTA : 18690 CACGAGTGCTTTGTTAAGCGTGTTGACTGGACTATTGAATATCCTATAATTGGTGATGAACTGAAGATTA : 18690 CACGAGTGCTTTGTTAAGCGTGTTGACTGGACTATTGAATATCCTATAATTGGTGATGAACTGAAGATTA : 18690 CACGAGTGCTTTGTTAAGCGTGTTGACTGGACTATTGAATATCCTATAATTGGTGATGAACTGAAGATTA : 18690 CACGAGTGCTTTGTTAAGCGTGTTGACTGGACTATTGAATATCCTATAATTGGTGATGAACTGAAGATTA : 18690 CACGAGTGCTTTGTAAGCGTGTTGACTGGACTATTGAATATCCTATAATTGGTGATGAACTGAAGATTA : 18690 CACGAGTGCTTTGTTAAGCGTGTTGACTGGACTATTGAATATCCTATAATTGGTGATGAACTGAAGATTA : 18690 CACGAGTGCTTTGTTAAGCGTGTTGACTGGACTATTGAATATCCTATAATTGGTGATGAACTGAAGATTA : 18690 CACGAGTGCTTTGTAAGCGTGTTGACTGGACTATTGAATATCCTATAATTGGTGATGAACTGAAGATTA : 18690 CACGAGTGCTTTGTAAGCGTGTTGACTGGACTATTGAATATCCTATAATTGGTGATGGACTGAACTGAAGATTA : 18690 CACGAGTGCTTTGTAAGCGTGTTGACTGGACTATTGAATACCC
SARS-COV2 - China/Wuhan-Hu-1 SARS-COV2 - Japan SARS-COV2 - South Korea SARS-COV2 - USA SARS-COV2 - USA SARS-COV2 - Viet Nam SARS-COV2 - Australia SARS-COV2 - Taiwan SARS-COV2 - Taiwan SARS-COV2 - Italy SARS-COV2 - India SARS-COV2 - Sweden SARS-COV2 - Sweden SARS-COV2 - Spain SARS-COV2 - Brazil SARS-COV2 - Pakistan	ATGCGGCTTGTAGAAAGGTTCAACACATGGTTGTTAAAGCTGCATTATTAGCAGACAAATTCCCAGTTCT: 18760ATGCGGCTTGTAGAAAGGTTCAACACATGGTTGTTAAAGCTGCATTATTAGCAGACAAATTCCCAGTTCT: 18760ATGCGGCTTGAGAAAGGTTCAACACATGGTTGTTAAAGCTGCATTATTAGCAGACAAATTCCCAGTTCT: 18760ATGCGGCTTGAGAAAGGTTCAACACACATGGTTGTTAAAGCTGCATTATTAGCAG

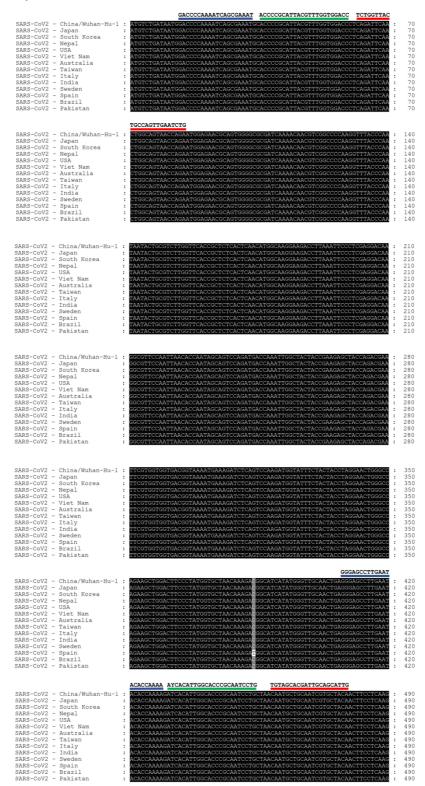
Suppl. Fig. 5. Partial sequence alignment of the new coronavirus (SARS-CoV2) N gene deposited at the GenBank. (A) Partial alignment of the N gene. (B) Partial alignment of the NSP14gene. The colors blue, red and green of the lines correspond to the forward and reverse primers and the probe, respectively, as recommended by the National Institute of Infectious Diseases, Department of Virology III/Japan.

AAATTTTGGGGACCAGGAAC				
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Viet Nam SARS-CoV2 - Taiwan SARS-CoV2 - Taiwan SARS-CoV2 - India SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Sweden SARS-CoV2 - Brain SARS-CoV2 - Brain	 CAAACCCAAGGAAATTTTGGGGACCAGGAACTAATCAGACAAGGAACTGATTACAAACATTGGCGCGAAA CAAACCCAAGGAAATTTTGGGGACCAGGAACTAATCAGACAAGGAACTGATTACAAACATTGGCCGCAAA 	910 910 910 910 910		
	ATGTCGCGCATTGGCATGGA			
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - Nepal SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - USA SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - Sweden SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	TTGCACAATTTGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC : TTGCACAATTTGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC : TTGCACAATTTGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC : TTGCACAATTTGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC : TTGCACAATTTGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC : TTGCACAATTGCCCCCAGCGCTTCAGCGTTCTTCGGAATGTCGCGCATTGGCATGGAAGTCACACCTTC :	980 980 980 980 980 980 980 980 980		
	TGGCAGCTGTGTAGGTCAAC			
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Vepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	: GGGAACGTGGTTGACCTACACAGGTGCCATCAAATTGGATGACAAAGATTCAAAATTTCAAAGATCAAAGTC : GGGAACGTGGTTGACCTACACAGGTGCCATCAAATTGGATGACAAAGATCCAAATTTCAAAGATCAAAGTC : GGGAACGTGGTTGACCTACACAGGTGCCATCAAATTGGATGACAAAGTCCAAATTTCAAAGATCAAAGTC : GGGAACGTGGTTGACCTACACAGGTGCCATCAAATTGGATGACAAAGATCCAAATTTCAAAGATCAAAGTC : GGGAACGTGGTTGACCTACACAGGTGCCATCAAATTGGATGACAAAGATCCAAATTTCAAAGATCAAGTC : GGGAACGTGGTTGACCTACACAGGTGCCATCAAATTGGATGACAAAGTCCAAATTTCAAAGATCAAGTC	1050 1050 1050 1050 1050 1050 1050 1050		
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - UISA SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - Sweden SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Spain SARS-CoV2 - Parail SARS-CoV2 - Parail	ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGGACCAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGGACCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGGACCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGGACCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA ATTTTGCTGAATAAGCATATTGACGCATACAAAACATTCCCACCAACAGAGCCTAAAAAGGACAAAAAGA	1120 1120 1120 1120 1120 1120 1120 1120		

Suppl. Fig. 6. Partial sequence alignment of the new coronavirus (SARS-CoV2) N gene deposited at the GenBank. (A) Partial alignment of the N gene. (B) Partial alignment of the NSP14gene. The colors blue, red and green of the lines correspond to the forward and reverse primers and the probe, respectively, as recommended by the National Institute of Health/Thailand.

	CGTTTGGTGGACCCTCAGAT CAA	
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	 ATGTCTGATAATGGACCCCAAAATCAGCGAAATGCACCCCGCATTACGTTTGGTGGACCCTCAGATTCAA 	70 70 70 70 70 70 70 70 70 70 70 70
	CTGGCAGTAACCA CCCCACTGCGTTCTCCATT	
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Vepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Taiwan SARS-CoV2 - India SARS-CoV2 - India SARS-CoV2 - Sweden SARS-CoV2 - Sweden SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	 CTGGCAGTAACCAGAATGGAGAACGCAGTGGGCGCGATCAAAACAACGTCGGCCCCAAGGTTTACCCAA CTGGCAGTAACCAGAATGGAGAACGCAGTGGGGCGCGATCAAAACAACGTCGGCCCCAAGGTTTACCCAA 	140 140 140 140 140 140 140 140 140 140
SARS-CoV2 - China/Wuhan-Hu-1	: TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA :	210
SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal	TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTGGTTCACCGCTCTCACCTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTGGTTCACCGCTCTCACCTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA TAATACTGCGTCTTGGTTCACCGCTCTCACTCAACATGGCAAGGAAGACCTTAAATTCCCTCGAGGACAA	210 210 210 210 210 210 210 210 210 210
	: GGCGTTCCAATTAACACCAATAGCAGTCCAGATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAA : GGCGTTCCAATTAACACCAATAGCAGTCCAGATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAA : GGCGTTCCAATTAACACCAATAGCAGTCCAGATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAAA : GGCGTTCCAATTAACACCAATAGCAGTCCAGATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAA : GGCGTTCCAATTAACACCAATGCAGTCCAGATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAA : GGCGTTCCAATTAACACCAATGCAGTCCAGATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAA : GGCGTTCCAATTAACACCAATGCAGTCCAGATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAA : GGCGTTCCAATTAACACCAATGCAGTCCAGATGACCAAATTGGCTACTACCGAAGAGCTACCAGACGAA : GGCGTTCCAATTAACACCAATGCAGTCCAGATGACCAAATTGGCTACTACCGAAGACTACCAGACGAA :	280 280 280 280 280 280 280 280 280 280

Suppl. Fig. 7. Partial sequence alignment of the new coronavirus (SARS-CoV2) N gene deposited at the GenBank. (A) Partial alignment of the N gene. (B) Partial alignment of the NSP14gene. The colors blue, red and green of the lines correspond to the forward and reverse primers and the probe, respectively, as recommended by the Centers for Disease Control and Prevention (CDC)/USA.



SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - Sweden	GAACAACATTGCCAAAAGGCT GAACAACATTGCCAAAAGGCT		EGGCAGTCAAGCCTCTTCT SEGGCAGTCAAGCCTCTTCT SEGGCAGTCAAGCCTCTTCT SEGGCAGTCAAGCCTCTTCT SEGGCAGTCAAGCCTCTTCT SEGGCAGTCAAGCCTCTTCT SEGGCAGTCAAGCCTCTTCT SEGGCAGTCAAGCCTCTTCT SEGGCAGTCAAGCCTCTTCT SEGGCAGTCAAGCCTCTTCT SEGGCAGTCAAGCCTCTTCT	SCTTCCTC : 560 SCTTCCTC : 560 SGTTCCTC : 560
SARS-CoV2 - Spain	 ATCACGTAGTCGCAACAGTTCI 		AGTAGGGAACTTCTCCTG CAGTAGGGAACTTCTCTG CAGTAGGGAACTTCTCCTG CAGTAGGGAACTTCTCCTG CAGTAGGGAACTTCTCCTG CAGTAGGGAACTTCTCCTG CAGTAGGGAACTTCTCCTG CAGTAGGGAACTTCTCCTG CAGTAGGGAACTTCTCCTG CAGTAGGGAACTTCTCCTG	TAGAATG : 630 TAGAATG : 630
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-COV2 - Viet Nam SARS-CoV2 - Viet Nam SARS-CoV2 - Taiwan SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - India SARS-CoV2 - Spain SARS-CoV2 - Brazil SARS-CoV2 - Pakistan	: GCTGGCAATGGCGGTGATGCT	schember Theorem and the schember of the schem	SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA SACAGATTGAACCAGCTTGA	AGCAAAA : 700
	TGTCTGGTAAAGGCCAACAACA		GAAAATCTGCTGCTGAGGGCT GAAAATCTGCTGCTGAGGCT GAAAATCTGCTGCTGAGGCT GGAAATCTGCTGCTGAGGCT GGAAATCTGCTGCTGAGGCT GGAAATCTGCTGCTGAGGCT AGAAATCTGCTGCTGGAGGCT AGAAATCTGCTGCTGAGGCT GGAAATCTGCTGCTGAGGCT GGAAATCTGCTGCTGCAGGCT GGAAATCTGCTGCTGCAGGCT	CTARGAA : 770 CTAAGAA : 770
SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Taiwan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Brazil	: GCCTCGGCAAAAACGTACTGCC	ACTANAGCATO CAATCINACC ACTANAGCATO CAATCINACC	ACAGCTTTCGCAGAGCTGC ACAAGCTTTCGCAGAGCGGC ACAAGCTTCGGCAGACGGC ACAAGCTTCGGCAGACGGC ACAAGCTTCGGCAGACGGC ACAAGCTTTCGGCAGACGGC ACAAGCTTCGGCAGACGGC ACAAGCTTCGGCAGACGGC ACAAGCTTCGGCAGACGGC ACAAGCTTCGGCAGACGGC ACAAGCTTCGGCAGACGGC ACAAGCTTCGGCAGACGGC ACAAGCTTCGGCAGACGGC	TCCAGAA: 840
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - USA SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Jialy SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - Sweden SARS-CoV2 - Spain SARS-CoV2 - Pakistan	: CAAACCCAAGGAAATTTTGGG : CAAACCCAAGGAAATTTTGGG	GACCAGGAACTAATCAGACAAC GACCAGGAACTAATCAGACAAC	GGAACTGATTACAAACATTGO GGAACTGATTACAAACATTGO	CCGCAAA : 910 CCGCAAA : 910 CCGCAAA : 910
SARS-CoV2 - China/Wuhan-Hu-1 SARS-CoV2 - Japan SARS-CoV2 - South Korea SARS-CoV2 - Nepal SARS-CoV2 - USA SARS-CoV2 - Viet Nam SARS-CoV2 - Australia SARS-CoV2 - Talyan SARS-CoV2 - Italy SARS-CoV2 - Italy SARS-CoV2 - Spain SARS-CoV2 - Spain SARS-CoV2 - Paxistan	: TTGCACAATTTGCCCCCAGCG : TTGCACAATTTGCCCCCAGCG : TTGCACAATTTGCCCCCAGCG : TTGCACAATTTGCCCCCAGCG	CTTCAGCGTTCTTCGGAATGTC CTTCAGCGTTCTTCGGAATGTC CTTCAGCGTTCTTCGGAATGTC	CGCGCATTGGCATGGAAGTC CGCGCATTGGCATGGAAGTC CGCGCATTGGCATGGAAGTC CGCGCATTGGCATGGAAGTC	CACCTTC : 980 CACCTTC : 980 CACCTTC : 980