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Supplemental Information

Amplification-free detection of SARS-CoV-2 with CRISPR-Cas13a and mobile phone microscopy

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Table S1: Related to Figures 1-4 and S1-4. List of custom oligonucleotides used in this study.

Oligo ID	Type	Source	Description	Sequence
PF039_crLbu_nCoV_1	crRNA	Synthego	SARS-CoV-2 crRNA 1	GACCACCCCAAAAAUGAAGGGGACU AAAACUUUCGCUGAUUUUGGGGUCC
PF040_crLbu_nCoV_2	crRNA	Synthego	SARS-CoV-2 crRNA 2	GACCACCCCAAAAAUGAAGGGGACU AAAACGGUCCACCAAACGUAAUGCG
PF041_crLbu_nCoV_3	crRNA	Synthego	SARS-CoV-2 crRNA 3	GACCACCCCAAAAAUGAAGGGGACU AAAACUCUGGUUACUGCCAGUUGAA
PF042_crLbu_nCoV_4	crRNA	Synthego	SARS-CoV-2 crRNA 4	GACCACCCCAAAAAUGAAGGGGACU AAAACUUUGCGGCCAAUGUUUGUAA
PF043_crLbu_nCoV_5	crRNA	Synthego	SARS-CoV-2 crRNA 5	GACCACCCCAAAAAUGAAGGGGACU AAAACGAAGCGCUGGGGGCAAAUUG
PF044_crLbu_nCoV_6	crRNA	Synthego	SARS-CoV-2 crRNA 6	GACCACCCCAAAAAUGAAGGGGACU AAAACAUGCGCGACAUUCCGAAGAA
PF045_crLbu_nCoV_7	crRNA	Synthego	SARS-CoV-2 crRNA 7	GACCACCCCAAAAAUGAAGGGGACU AAAACUUGGUGUAUUCAAGGCUCCC
PF046_crLbu_nCoV_8	crRNA	Synthego	SARS-CoV-2 crRNA 8	GACCACCCCAAAAAUGAAGGGGACU AAAACGGAUUGCGGGUGCCAAUGUG
PF047_crLbu_nCoV_9	crRNA	Synthego	SARS-CoV-2 crRNA 9	GACCACCCCAAAAAUGAAGGGGACU AAAACUGUAGCACGAUUGCAGCAUU
PF051_crLbu_nCoV_13	crRNA	Synthego	SARS-CoV-2 crRNA 10	GACCACCCCAAAAAUGAAGGGGACU AAAACUCUAGCAGGAGAAGUUCCCC
PF052_crLbu_nCoV_14	crRNA	Synthego	SARS-CoV-2 crRNA 11	GACCACCCCAAAAAUGAAGGGGACU AAAACUCUGUCAAGCAGCAGCAAAG
PF084_crLbu_nCov15v2	crRNA	Synthego	SARS-CoV-2 crRNA 12	GACCACCCCAAAAAUGAAGGGGACU AAAACGACAUUUUGCUCUCAAGCUG
PF088_crLbu_nCoV_19	crRNA	Synthego	SARS-CoV-2 crRNA 19	GACCACCCCAAAAAUGAAGGGGACU AAAACCUAUUAACUAUUAACGUACC
PF089_crLbu_nCoV_20	crRNA	Synthego	SARS-CoV-2 crRNA 20	GACCACCCCAAAAAUGAAGGGGACU AAAACUAUUGCAGCAGUACGCACAC
PF090_crLbu_nCoV_21	crRNA	Synthego	SARS-CoV-2 crRNA 21	GACCACCCCAAAAAUGAAGGGGACU AAAACAGCGCAGUAAGGAUGGCUAG
PF091_crLbu_nCoV_22	crRNA	Synthego	SARS-CoV-2 crRNA 22	GACCACCCCAAAAAUGAAGGGGACU AAAACGUAACUAGCAAGAAUACCAC
PF030_crLbu_NT1_L	crRNA	Synthego	Nontargeting crRNA	GACCACCCCAAAAAUGAAGGGGACU AAAACAGGUUCUUGACUACCGUAAU U
PolyU reporter	Reporter	IDT	PolyU Reporter	/56-FAM/rUrUrUrUrU/3IABkFQ/
PF_019_T7NgeneL_F	PCR	Elim Bio	Forward primer for N gene block	CTTCCATGCCAATGCGCGAC
PF_020_T7NgeneL_R	PCR	Elim Bio	Reverse primer for N gene block	TAATACGACTCACTATAG
PF_051_M13T7_F	PCR	Elim Bio	Forward primer for IDT SARS-CoV-2 and MERS-CoV N gene PCR	TAATACGACTCACTATAGTAAAACGA CGGCCAGT
PF_052_M13_R	PCR	Elim Bio	Reverse primer for IDT SARS-CoV-2 and MERS-CoV N gene PCR	CAGGAAACAGCTATGAC
PF_039_nCoV_N5_F	qPCR	Elim Bio	Forward N gene primer for SARS-CoV-2 qPCR	AAATTTTGGGGACCAGGAAC
PF_040_nCoV_N5_R	qPCR	Elim Bio	Reverse N gene primer for	TGGCACCTGTGTAGGTCAAC

			SARS-CoV-2 qPCR	
PF_041_nCoV_N5_P	qPCR	Elim Bio	N gene probe for SARS-CoV-2 qPCR	FAM-ATGTCGCGCATTGGCATGGA-BHQ1
PF_042_nCoV_E_F	qPCR/PCR	Elim Bio	Forward E gene primer for SARS-CoV-2 qPCR/PCR	ACAGGTACGTTAATAGTTAATAGCGT
PF_043_nCoV_E_R	qPCR/PCR	Elim Bio	Reverse E gene primer for SARS-CoV-2 qPCR/PCR	ATATTGCAGCAGTACGCACACA
PF_044_nCoV_E_P	qPCR	Elim Bio	E gene probe for SARS-CoV-2 qPCR	FAM-ACACTAGCCATCCTTACTGCGCTTCG-BHQ1
N gene block	gBlock	IDT	N gene IVT Template	CTTCCATGCCAATGCGCGACATTCCG AAGAACGCTGAAGCGCTGGGGGCAA ATTGTGCAATTTGCGGCCAATGTTTG TAATCAGTTCCTTGTCTGATTAGTTCC TGGTCCCCAAAATTTCCTTGGGTTTG TTCTGGACCACGTCTGCCGAAAGCTT GTGTTACATTGTATGCTTTAGTGGCA GTACGTTTTTGCCGAGGCTTCTTAGA AGCCTCAGCAGCAGATTTCTTAGTGA CAGTTTGGCCTTGTTGTTGTTGGCCT TTACCAGACATTTTGCTCTCAAGCTG GTTCAATCTGTCAAGCAGCAGCAAAG CAAGAGCAGCATCACCGCCATTGCCA GCCATTCTAGCAGGAGAAGTTCCCCT ACTGCTGCCTGGAGTTGAATTTCTTG AACTGTTGCGACTACGTGATGAGGAA CGAGAAGAGGCTTGACTGCCGCCTC TGCTCCCTTCTGCGTAGAAGCCTTTT GGCAATGTTGTTCCTTGAGGAAGTTG TAGCACGATTGCAGCATTGTTAGCAG GATTGCGGGTGCCAATGTGATCTTTT GGTGTATTCAAGGCTCCCTCAGTTGC AACCCATATGATGCCGTCTTTGTTAG CACCATAGGGAAGTCCAGCTTCTGGC CCAGTTCCTAGGTAGTAGAAATACCA TCTTGGACTGAGATCTTTCATTTTACC GTCACCACCACGAATTCGTCTGGTAG CTCTTCGGTAGTAGCCAATTTGGTCA TCTGGACTGCTATTGGTGTTAATTGG AACGCCTTGTCCTCGAGGGAATTTAA GGTCTTCCTTGCCATGTTGAGTGAGA GCGGTGAACCAAGACGCAGTATTATT GGGTAAACCTTGGGGCCGACGTTGT TTTGATCGCGCCCCACTGCGTTCTCC ATTCTGGTTACTGCCAGTTGAATCTG AGGGTCCACCAAACGTAATGCGGGG TGCATTTCGCTGATTTTGGGGTCCAT TATCAGACCTATAGTGAGTCGTATTA