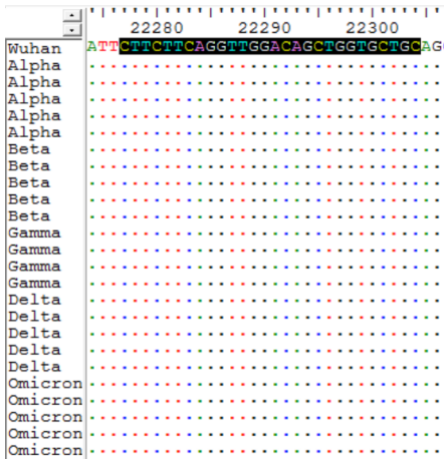
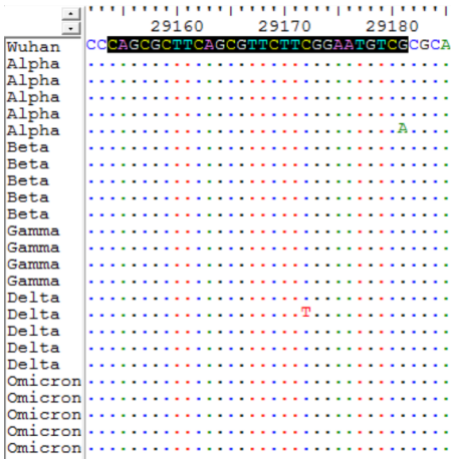
Figure S1: Multiple sequence alignments of SARS-CoV-2 VOC (Alpha, Beta, Gamma, Delta and Omicron strains). The black highlight represented the binding sites of primers or crRNAs obtained from each assay. The dots represent the conserve sequences whereas the bases (A T, C or G) represent the mutations occurred in the VOC.

Title: A CRISPR-based and post-amplification coupled SARS-CoV-2 detection with a portable evanescent wave biosensor

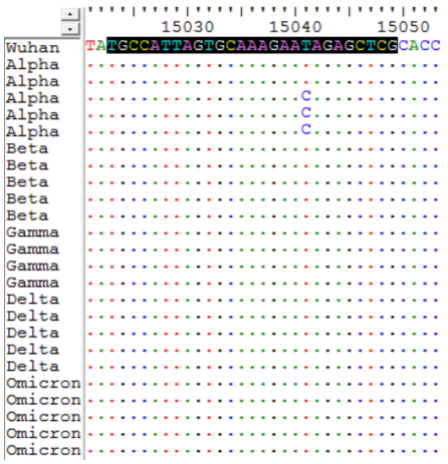
Target: S gene
Oligo: SARS-CoV-2 gene S crRNA (anti-sense)



Target: N gene
Oligo: SARS-CoV-2 gene N crRNA (anti-sense)

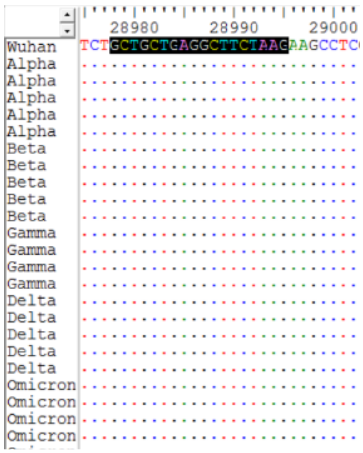


Target: Orf1ab gene
Oligo: Universal crRNA Orf1ab (anti-sense)

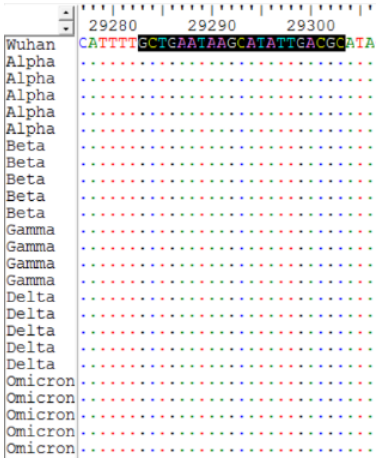


Title: A Novel Miniature CRISPR-Cas13 System for SARS-CoV Diagnostics

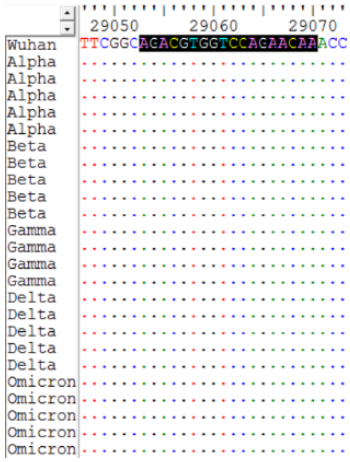
Target: N gene
Oligo: SC-F3



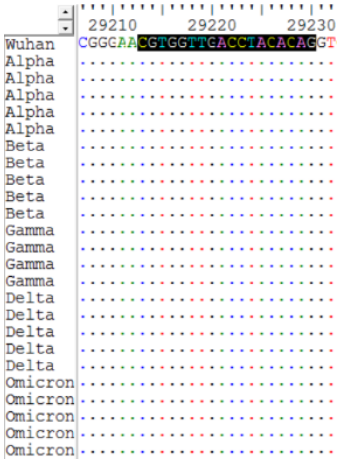
Target: N gene
Oligo: SC-B3 (anti-sense)



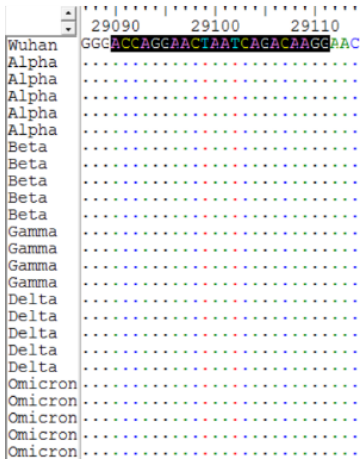
Target: N gene
Oligo: SC-FIP



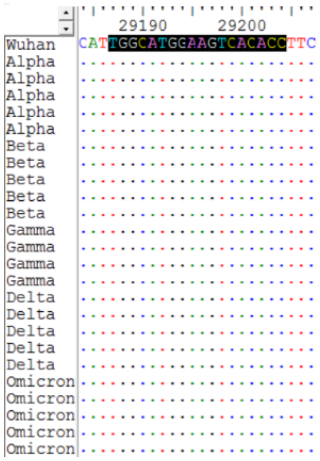
Target: N gene
Oligo: SC-BIP (anti-sense)



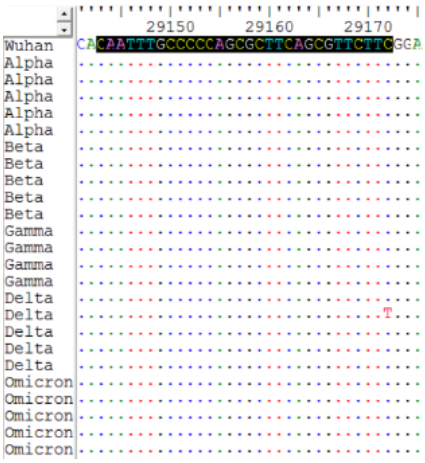
Target: N gene
Oligo: SC-LF (anti-sense)



Target: N gene
Oligo: SC-LB

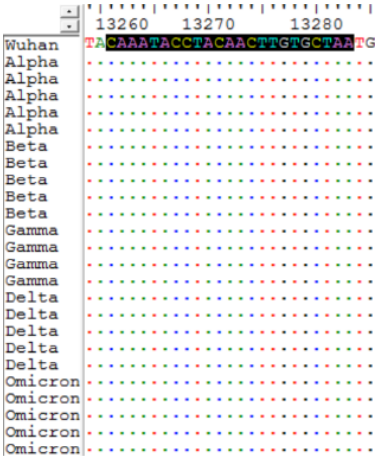


Target: N gene
Oligo: crRNA 4

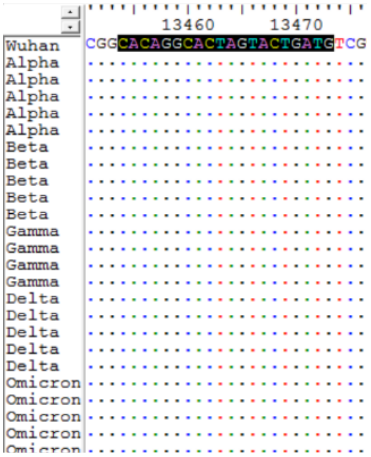


Title: A one-step, one-pot CRISPR nucleic acid detection platform (CRISPR-top): Application for the diagnosis of COVID-19

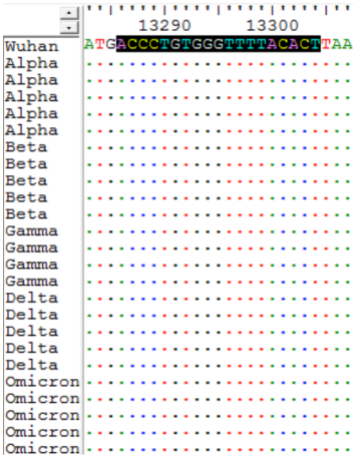
Target: Orf1ab
Oligo: ORF1ab-F3



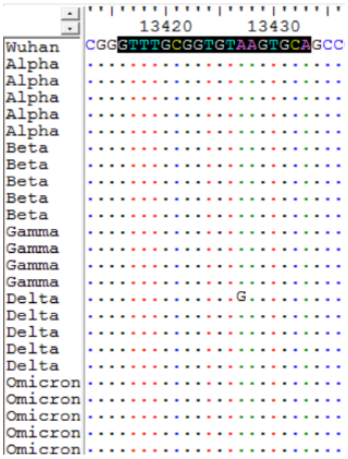
Target: Orf1ab
Oligo: ORF1ab-B3 (anti-sense)



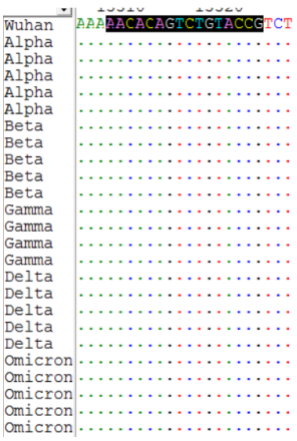
Target: Orf1ab
Oligo: ORF1ab-FIP



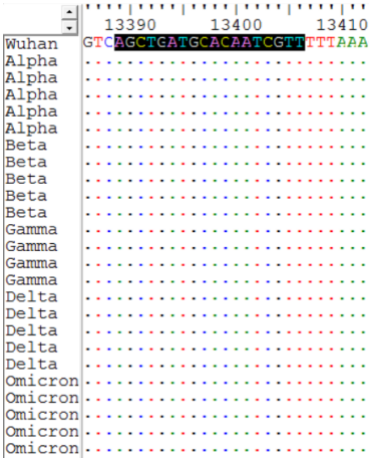
Target: Orf1ab
Oligo: ORF1ab-BIP (anti-sense)



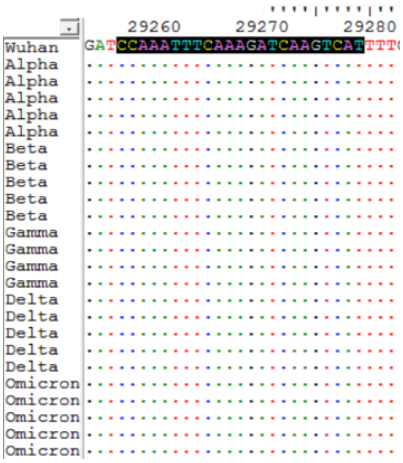
Target: Orf1ab
Oligo: ORF1ab-LF (anti-sense)



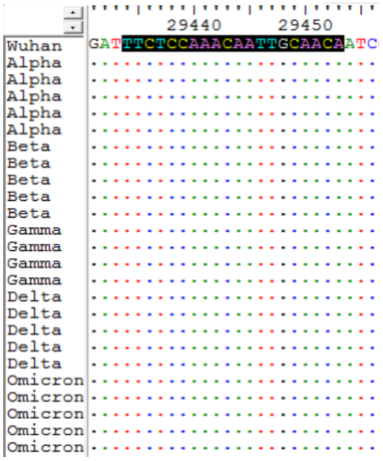
Target: Orf1ab
Oligo: ORF1ab-LB



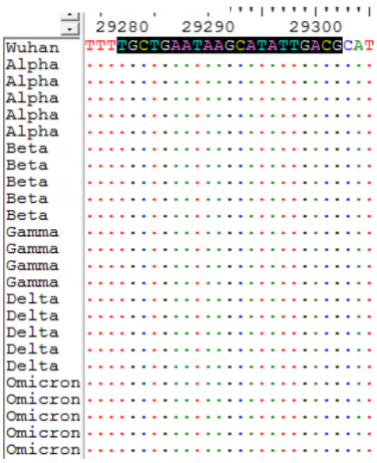
Target: N gene
Oligo: NP-F3



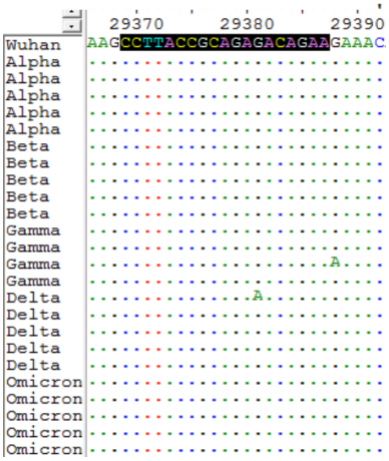
Target: N gene
Oligo: NP-B3 (anti-sense)



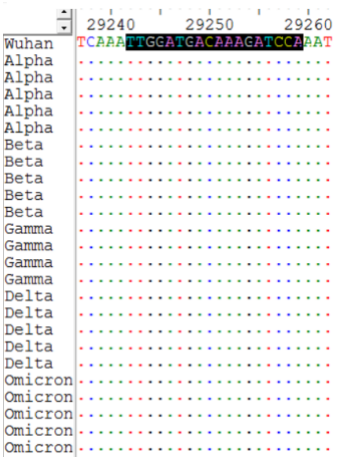
Target: N gene
Oligo: NP-FIP



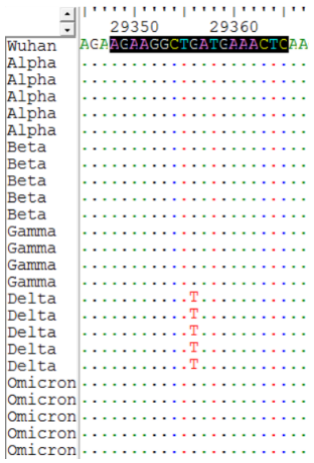
Target: N gene
Oligo: NP-BIP (anti-sense)



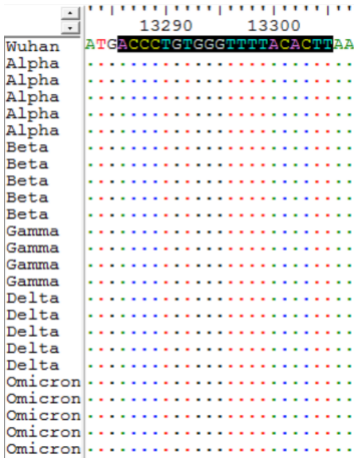
Target: N gene
Oligo: NP-LF (anti-sense)



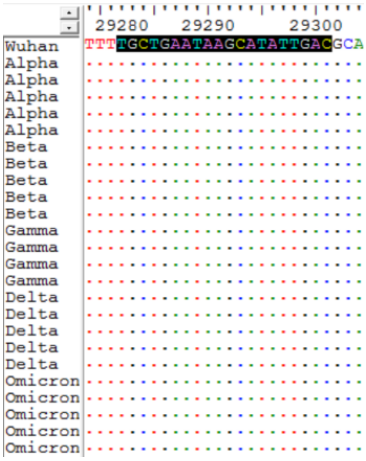
Target: N gene
Oligo: NP-LB



Target: Orf1ab
Oligo: ORF1ab-gRNA

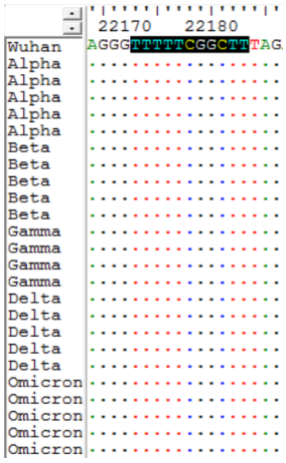


Target: Orf1ab
Oligo: NP-gRNA

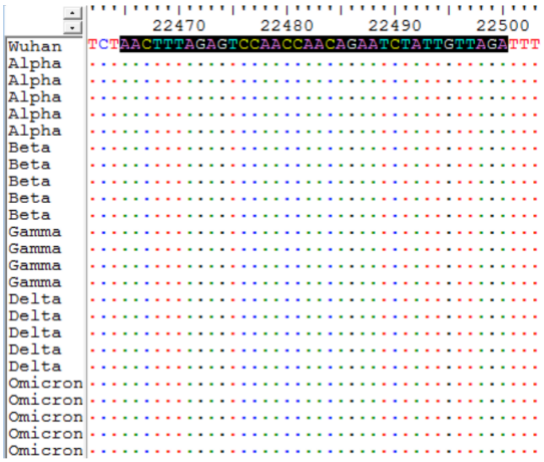


Title: A Saliva-Based RNA Extraction-Free Workflow Integrated With Cas13a for SARS-CoV-2 Detection

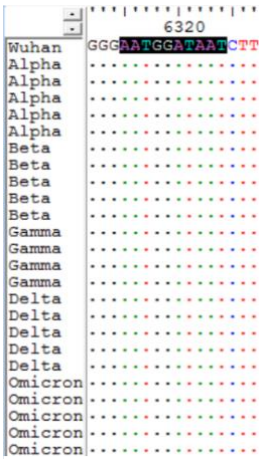
Target: S gene
Oligo: T7-S-FP



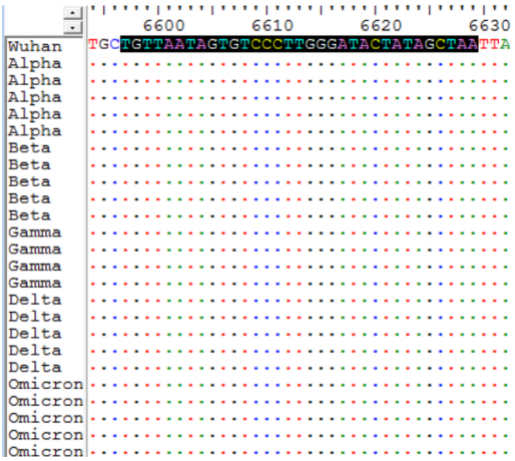
Target: S gene
Oligo: T7-S-RP (anti-sense)



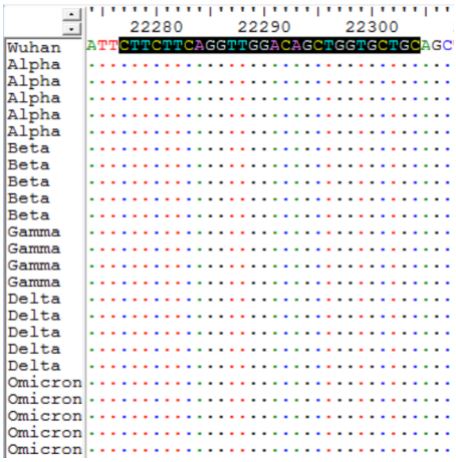
Target: Orf1ab
Oligo: T7-Orf1ab-FP



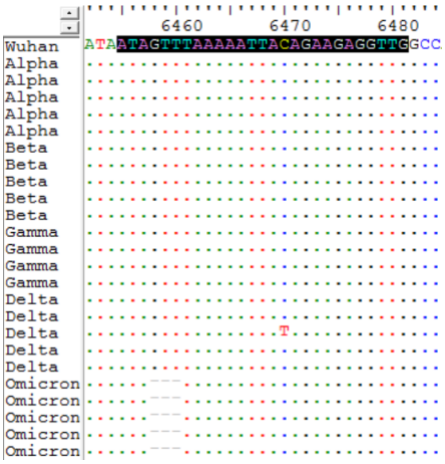
Target: Orf1ab
Oligo: T7-Orf1ab-RP (anti-sense)



Target: S gene
Oligo: S gene crRNA (anti-sense)

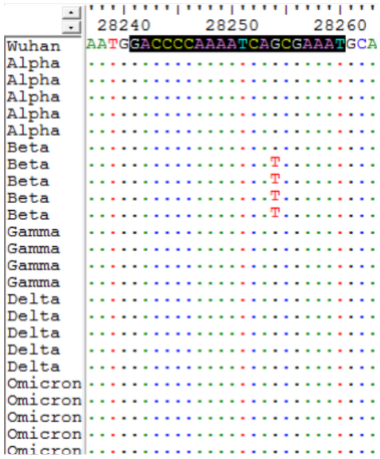


Target: Orf1ab
Oligo: Orf1ab crRNA (anti-sense)

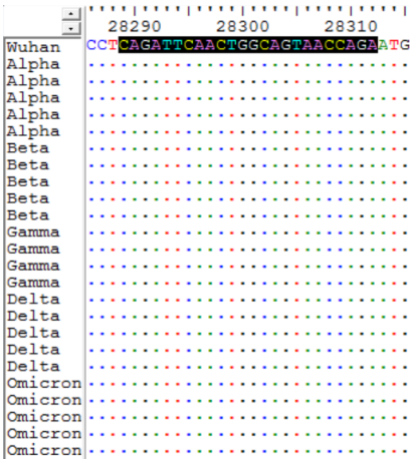


Title: A Scalable, Easy-to-Deploy Protocol for Cas13-Based Detection of SARS-CoV-2 Genetic Material

Target: N gene
Oligo: N1 fwd



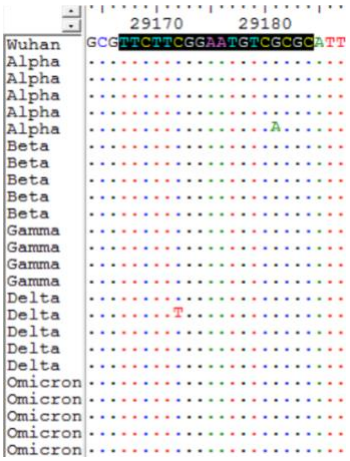
Target: N gene
Oligo: N1 rev (anti-sense)



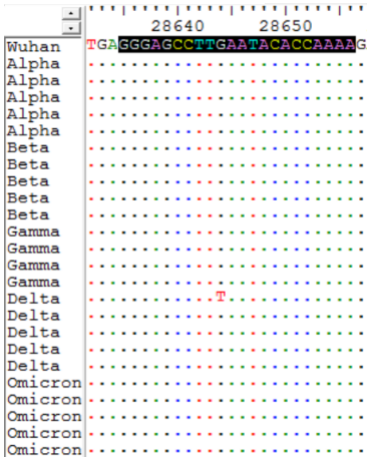
Target: N gene
Oligo: N2 fwd



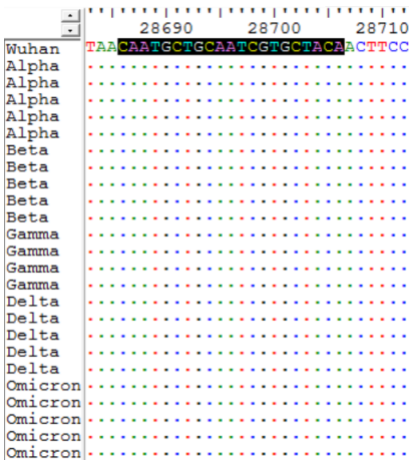
Target: N gene
Oligo: N2 rev (anti-sense)



Target: N gene
Oligo: N3 fwd

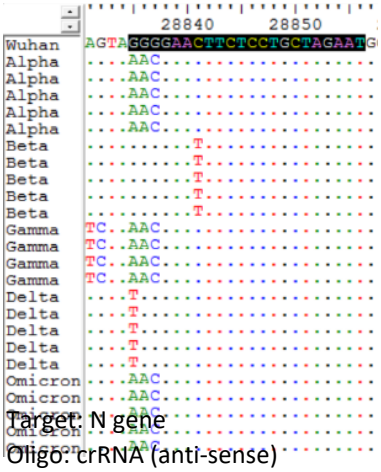


Target: N gene
Oligo: N3 rev (anti-sense)

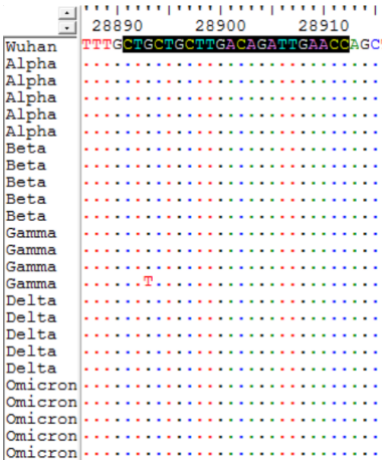


Title: A smartphone-based visual biosensor for CRISPR-Cas powered SARS-CoV-2 diagnostics

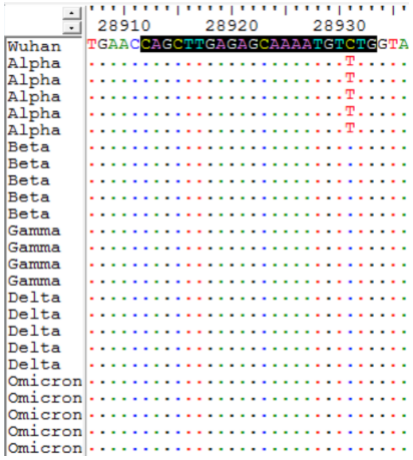
Target: N gene
Oligo: PCR Forward primer Target: N gene



Target: N gene
Oligo: crRNA (anti-sense)



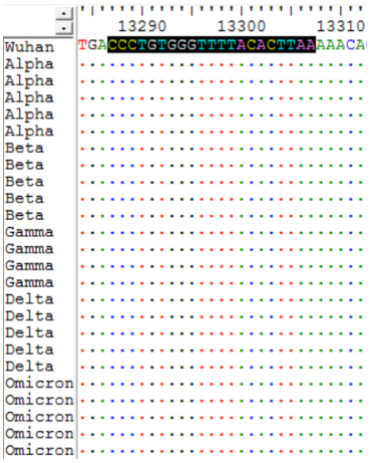
Target: N gene
Oligo: PCR Reverse primer (anti-sense)



Title: A smartphone-read ultrasensitive and quantitative saliva test for COVID-19

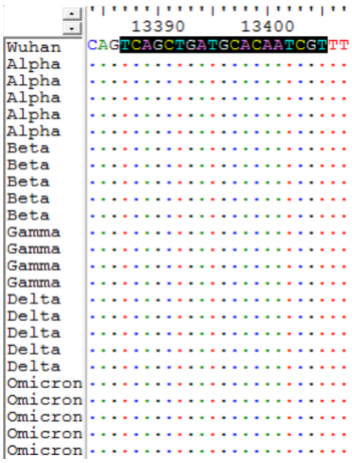
Target: ORF1ab

Oligo: ORF1ab-F



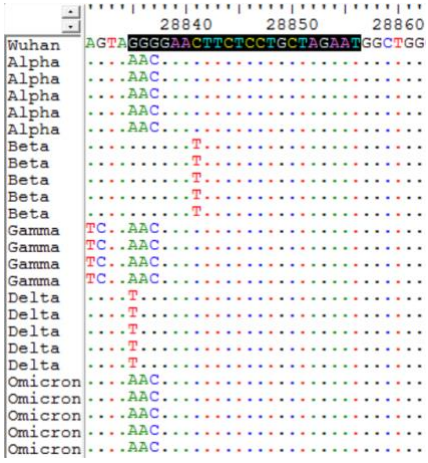
Target: ORF1ab

Oligo: ORF1ab-R (anti-sense)



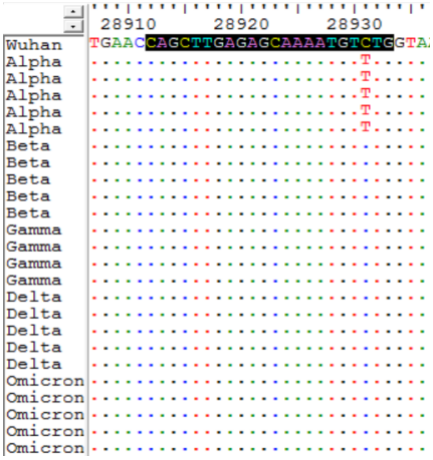
Target: N gene

Oligo: N Forward Primer



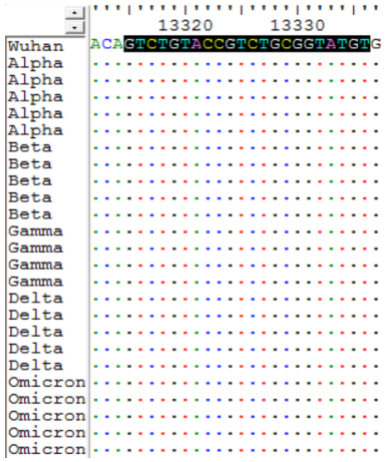
Target: N gene

Oligo: N Reverse Primer (anti-sense)



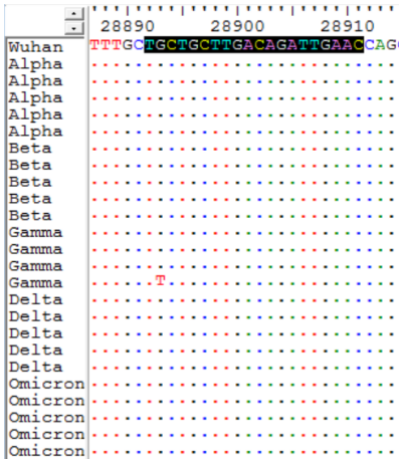
Target: ORF1ab

Oligo: gRNA -ORF1ab (anti-sense)



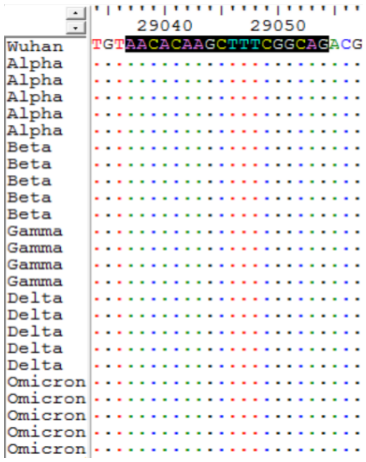
Target: N gene

Oligo: N gRNA (sense)



Title: A Thermostable Cas12b from Brevibacillus Leverages One-pot Detection of SARS-CoV-2 Variants of Concern

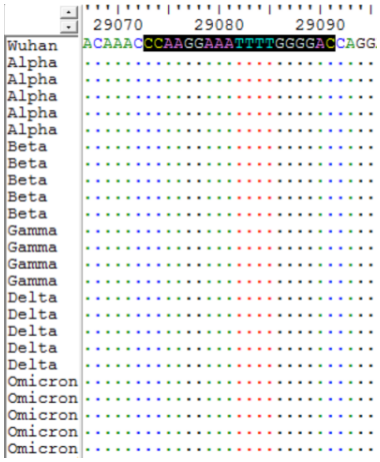
Target: N gene
Oligo: N_F3



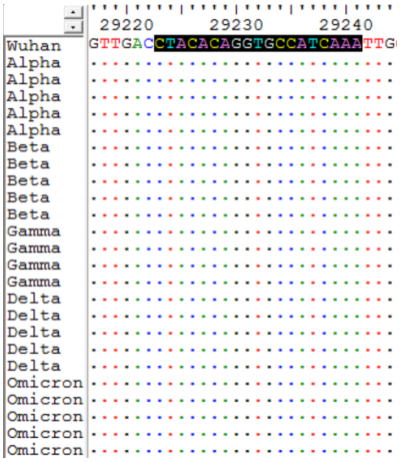
Target: N gene
Oligo: N_B3 (anti-sense)



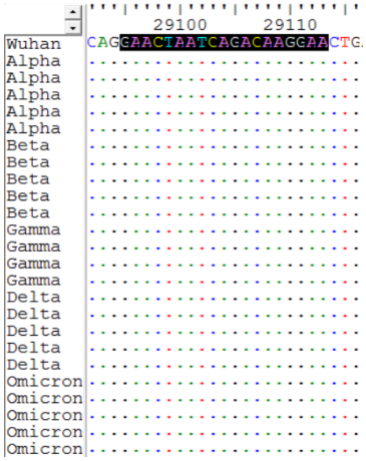
Target: N gene
Oligo: N_FIP



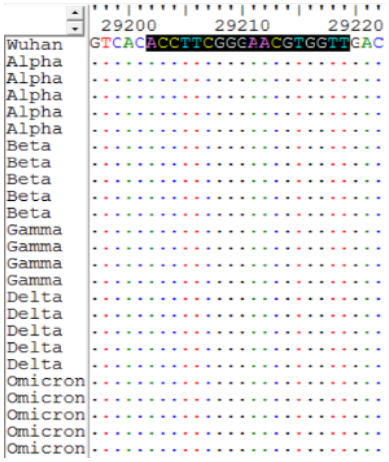
Target: N gene
Oligo: N_BIP (anti-sense)



Target: N gene
Oligo: N_LF (anti-sense)

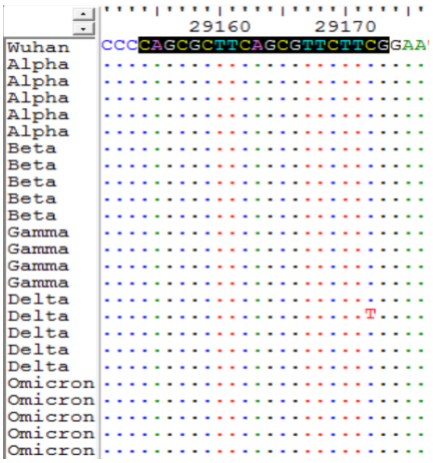


Target: N gene
Oligo: N_LB



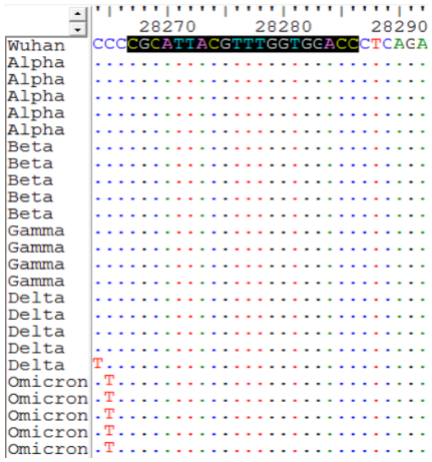
Target: N gene

Oligo: N gene crRNA for presence of SARS-CoV-2 (anti-sense)

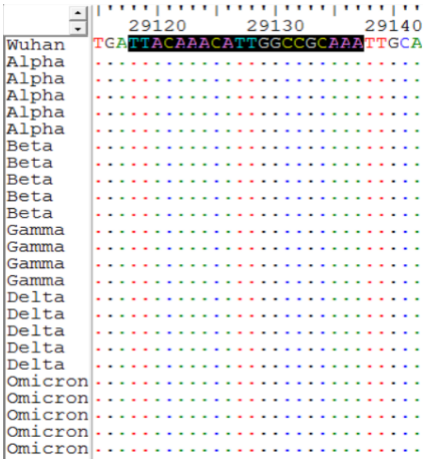


Title: Amplification-free detection of SARS-CoV-2 with CRISPR-Cas13a and mobile phone microscopy

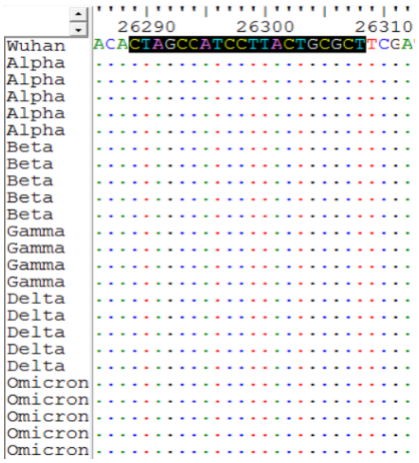
Target: N gene
Oligo: SARS-CoV-2 crRNA 2 (anti-sense)



Target: N gene
Oligo: SARS-CoV-2 crRNA 4 (anti-sense)



Target: N gene
Oligo: SARS-CoV-2 crRNA 21 (anti-sense)

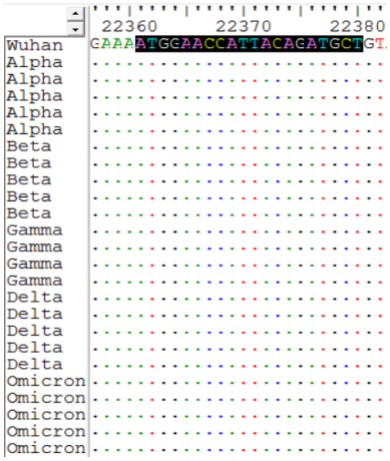


Title: An engineered CRISPR-Cas12a variant and DNA-RNA hybrid guides enable robust and rapid COVID-19 testing

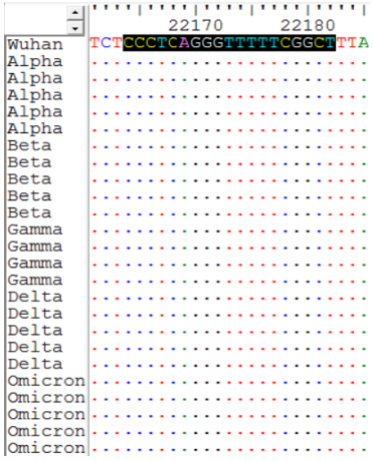
Target: S gene
Oligo: S2 F3



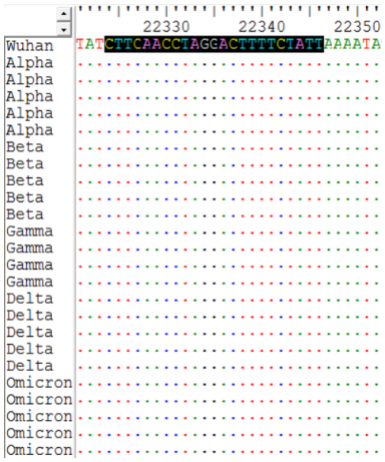
Target: S gene
Oligo: S2 B3 (anti-sense)



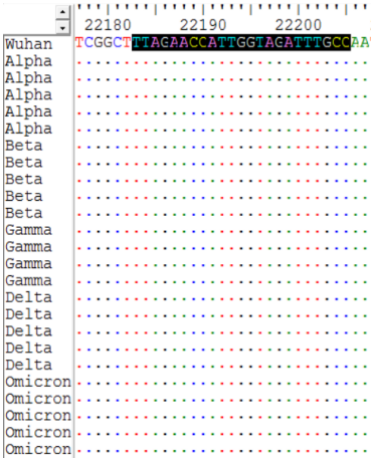
Target: S gene
Oligo: S2 FIP (set C)



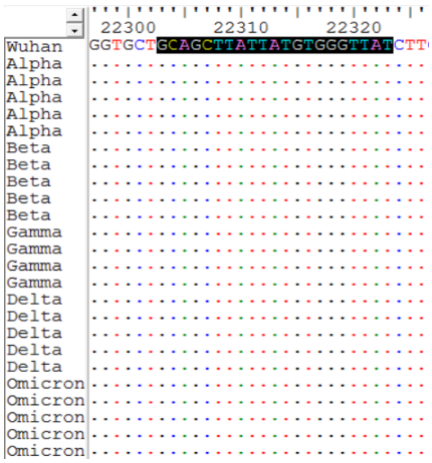
Target: S gene
Oligo: S2 BIP (anti-sense)



Target: S gene
Oligo: S2 LF (anti-sense)



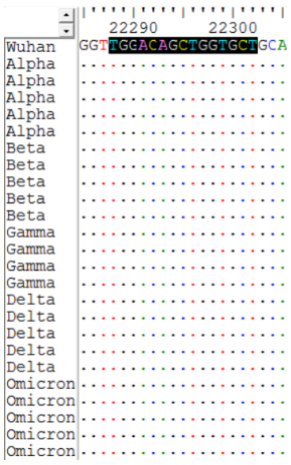
Target: S gene
Oligo: S2 LB



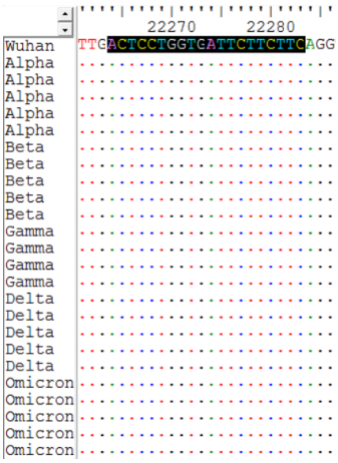
Target: S gene
Oligo: S2 Swarm F1c (anti-sense)



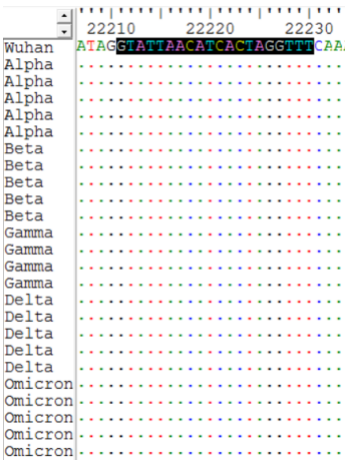
Target: S gene
Oligo: S2 Swarm B1c



Target: S gene
Oligo: As-S2



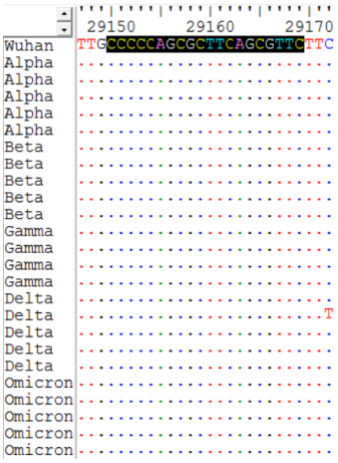
Target: S gene
Oligo: As-S6 (anti-sense)



Title: Application of the amplification-free SERS-based CRISPR/Cas12a platform in the identification of SARS-CoV-2 from clinical samples

Target: N gene

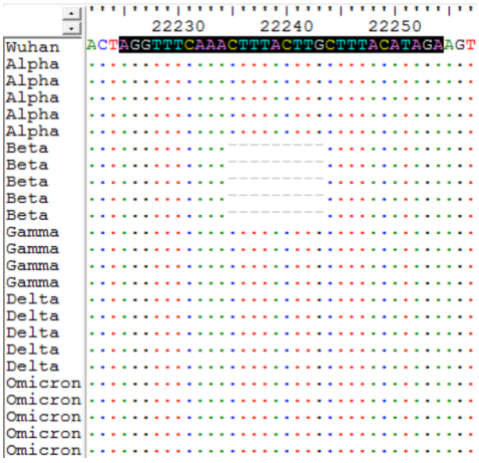
Oligo: SARS-CoV-2 N gene crRNA



Title: Clinical validation of a Cas13-based assay for the detection of SARS-CoV-2 RNA

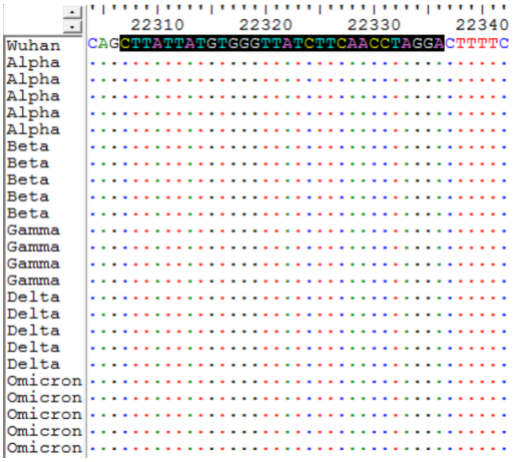
Target: S gene

Oligo: SL_S-RPA-Forward_v1



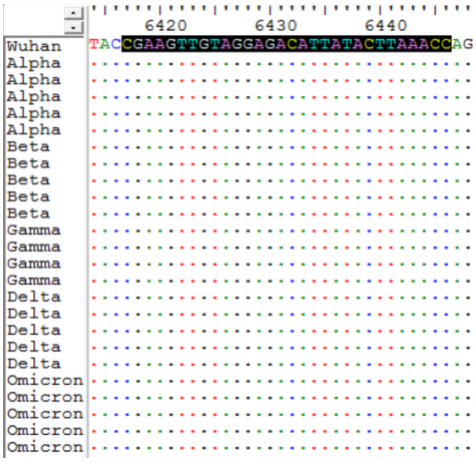
Target: S gene

Oligo: SL_S-RPA-Reverse_v1 (anti-sense)



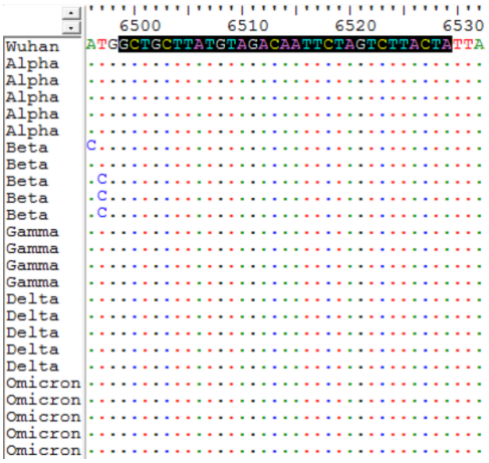
Target: Orf1ab

Oligo: SL_Orf1ab-RPAForward_v1



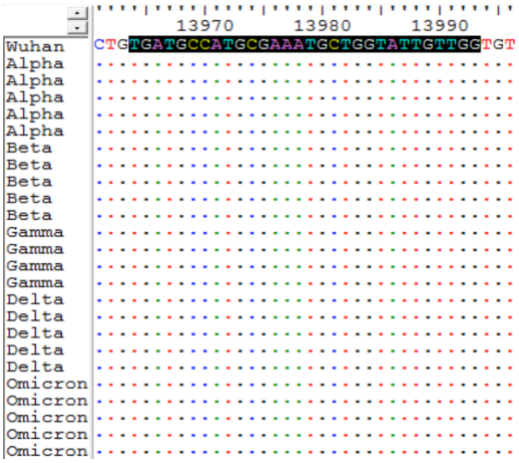
Target: Orf1ab

Oligo: SL_Orf1ab-RPAReverse_v1 (anti-sense)



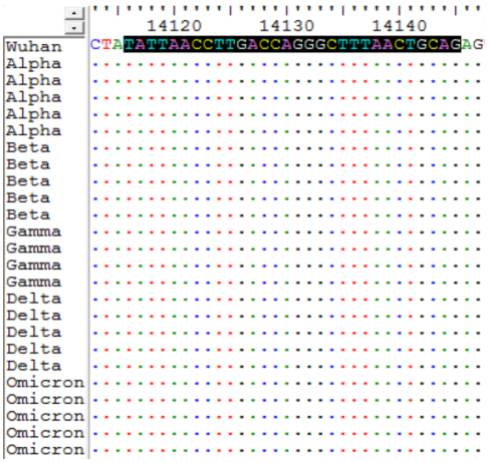
Target: Orf1b

Oligo: SI_Orf1b-RPAForward_v1



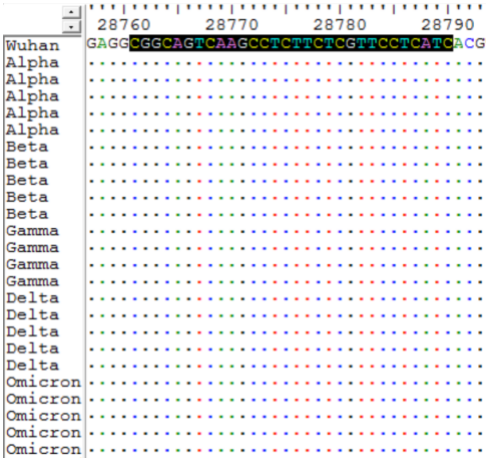
Target: Orf1b

Oligo: SI_Orf1b-RPAReverse_v1 (anti-sense)



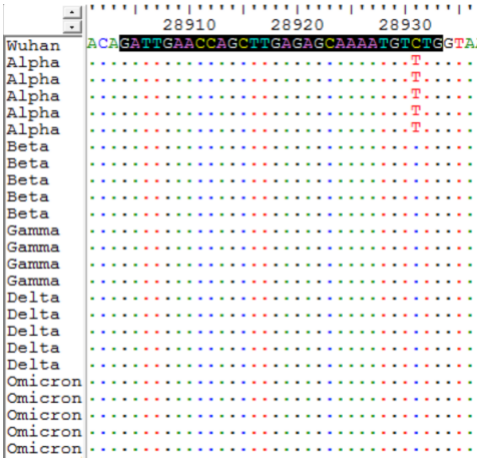
Target: N gene

Oligo: SI_N-RPA-Forward_v1



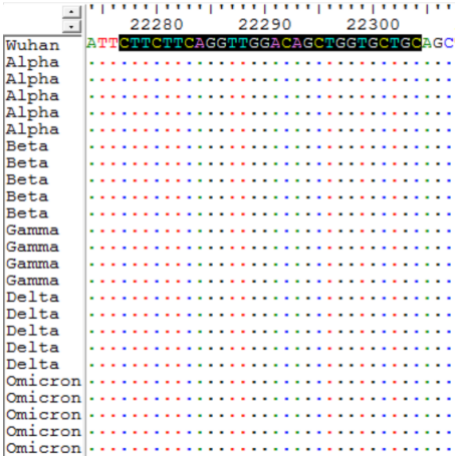
Target: N gene

Oligo: SI_N-RPA-Reverse_v1 (anti-sense)



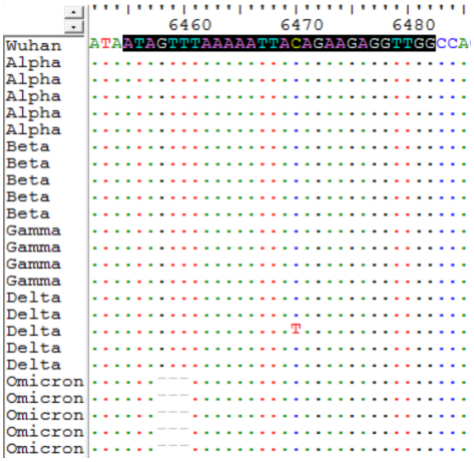
Target: S gene

Oligo: 13a_SL_S-crRNA_v1 (anti-sense)



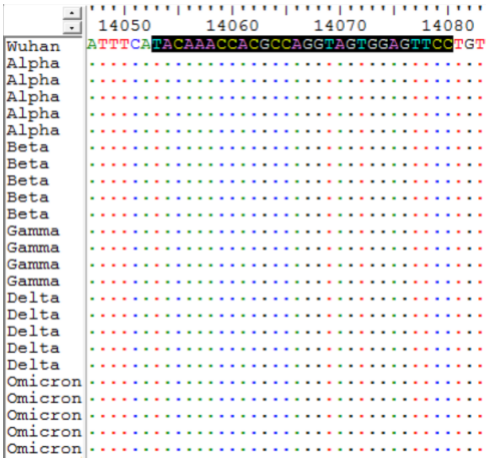
Target: Orf1ab

Oligo: 13a_SL_Orf1abcrRNA_v1 (anti-sense)



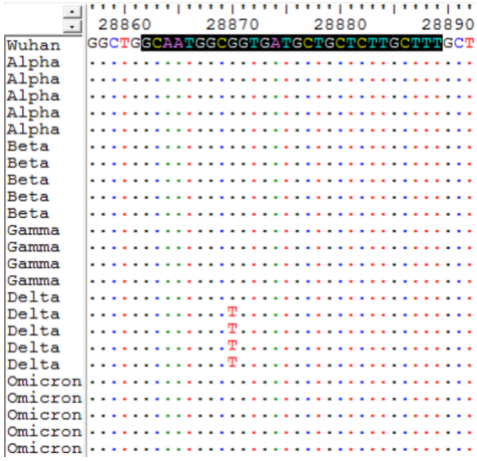
Target: Orf1b

Oligo: 13a_SI_Orf1b-crRNA_v1 (anti-sense)



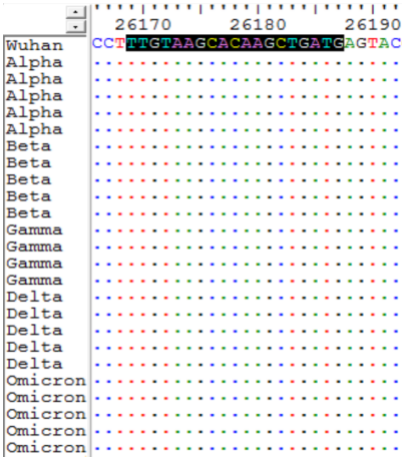
Target: N gene

Oligo: 13a_SI_N-crRNA_v1 (anti-sense)

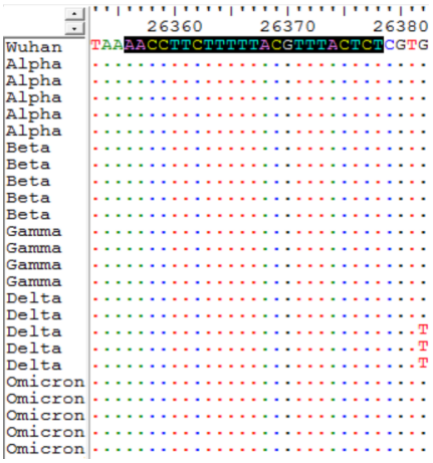


Title: Contamination-free visual detection of SARS-CoV-2 with CRISPR/Cas12a: A promising method in the point-of-care detection

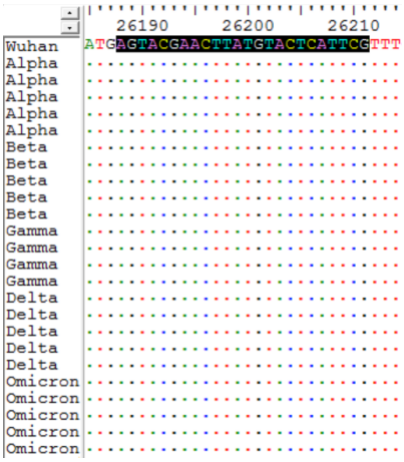
Target: E gene
Oligo: RT-LAMP E-F3



Target: E gene
Oligo: RT-LAMP E-B3 (anti-sense)



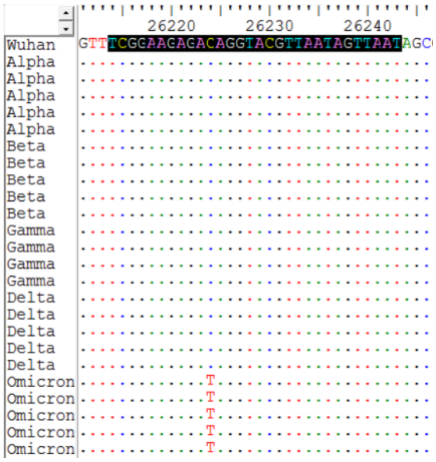
Target: E gene
Oligo: RT-LAMP E-FIP



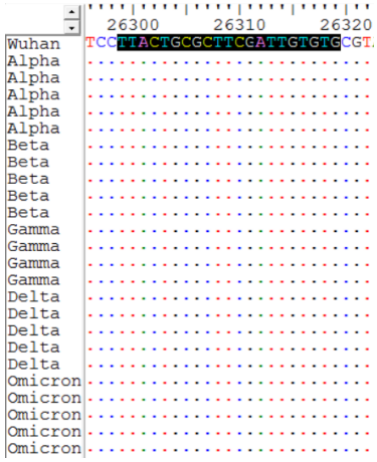
Target: E gene
Oligo: RT-LAMP E-BIP (anti-sense)



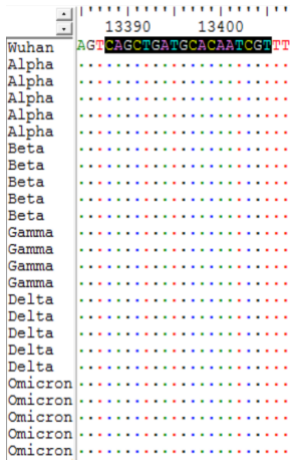
Target: E gene
Oligo: RT-LAMP E-LF (anti-sense)



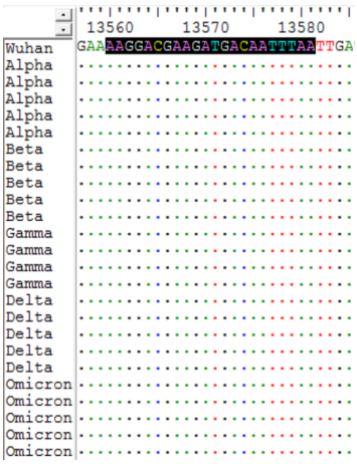
Target: E gene
Oligo: RT-LAMP E-LB



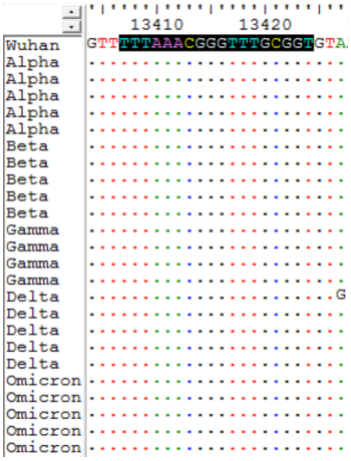
Target: Orf1ab
Oligo: RT-LAMP ORF-F3



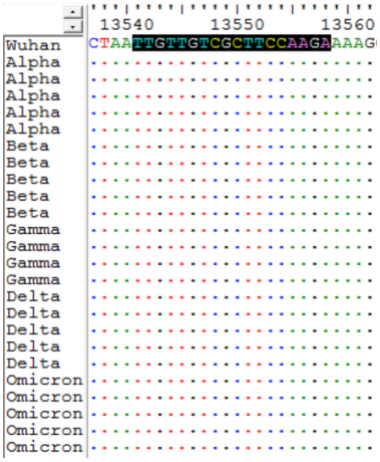
Target: Orf1ab
Oligo: RT-LAMP ORF-B3 (anti-sense)



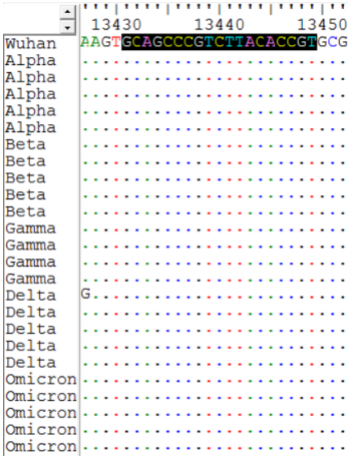
Target: Orf1ab
Oligo: RT-LAMP ORF-FIP



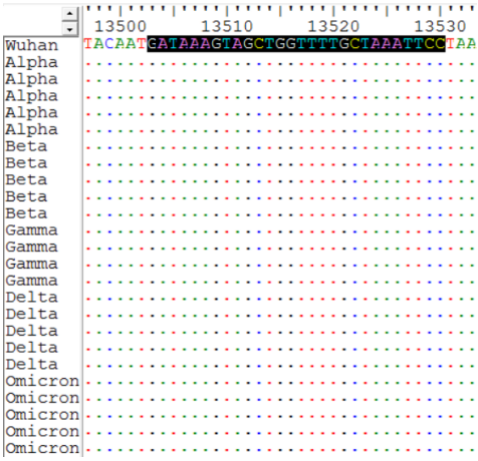
Target: Orf1ab
Oligo: RT-LAMP ORF-BIP (anti-sense)



Target: Orf1ab
Oligo: RT-LAMP ORF-LF (anti-sense)

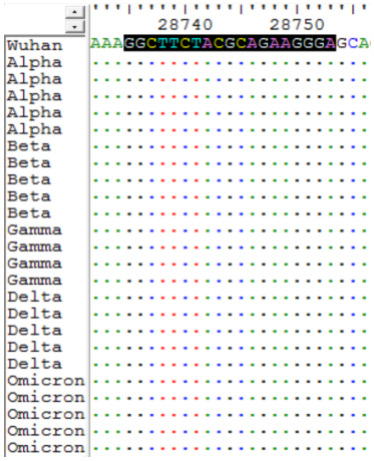


Target: Orf1ab
Oligo: RT-LAMP ORF-LB



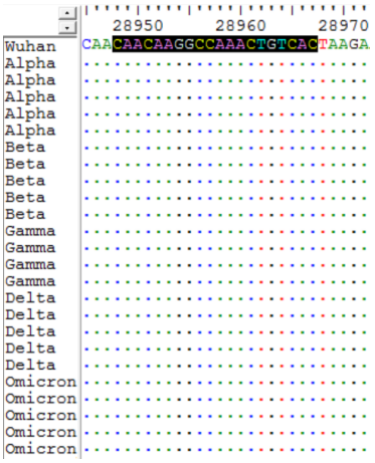
Target: N gene

Oligo: RT-LAMP N-F3



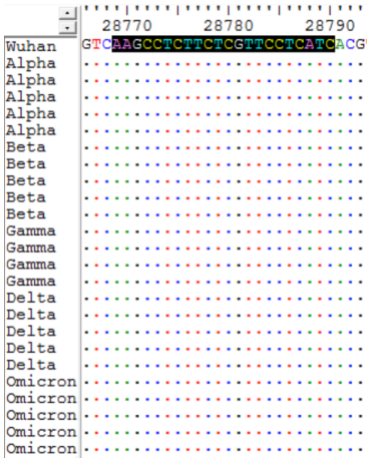
Target: N gene

Oligo: RT-LAMP N-B3 (anti-sense)



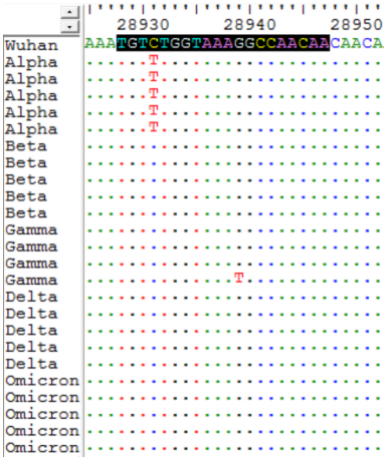
Target: N gene

Oligo: RT-LAMP N-FIP



Target: N gene

Oligo: RT-LAMP N-BIP (anti-sense)



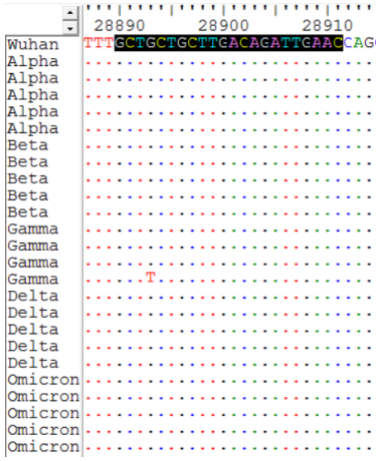
Target: N gene

Oligo: RT-LAMP N-LF (anti-sense)

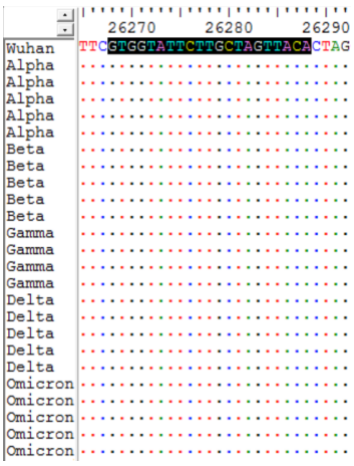


Target: N gene

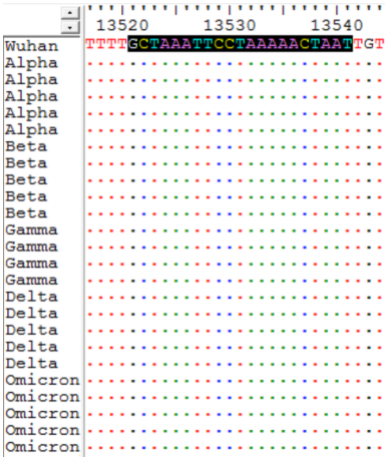
Oligo: RT-LAMP N-LB



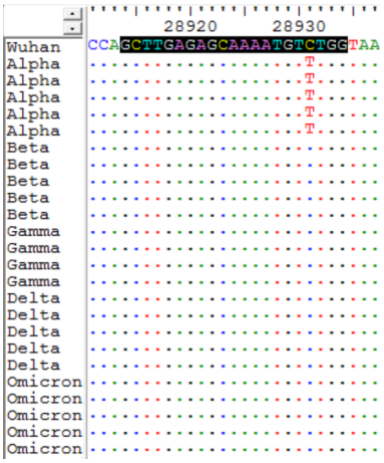
Target: E gene
Oligo: E-gRNA



Target: Orf1ab
Oligo: ORF-gRNA



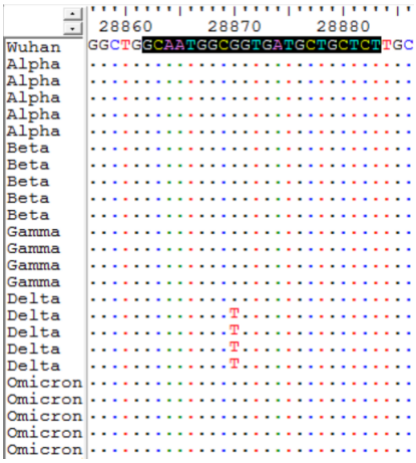
Target: N gene
Oligo: N-gRNA



Title: CRISPR/Cas12a Technology Combined with RT-ERA for Rapid and Portable SARS-CoV-2 Detection

Target: N gene

Oligo: F



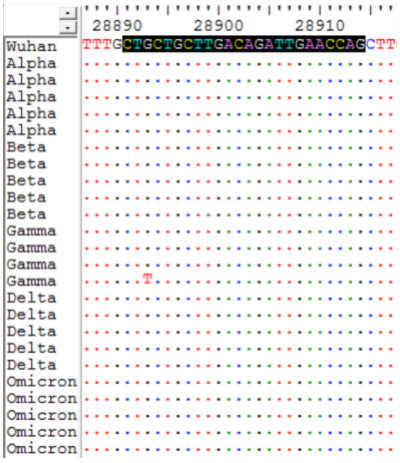
Target: N gene

Oligo: R (anti-sense)



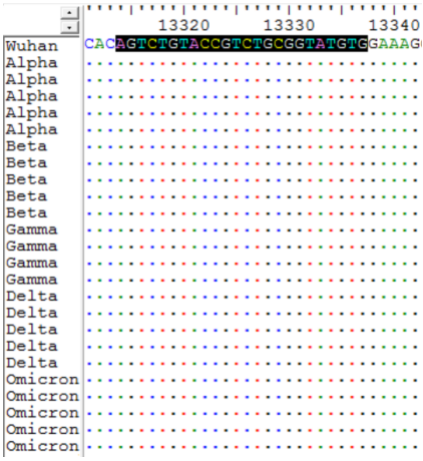
Target: N gene

Oligo: crRNA



Target: Orf1ab

Oligo: crRNA (anti-sense)



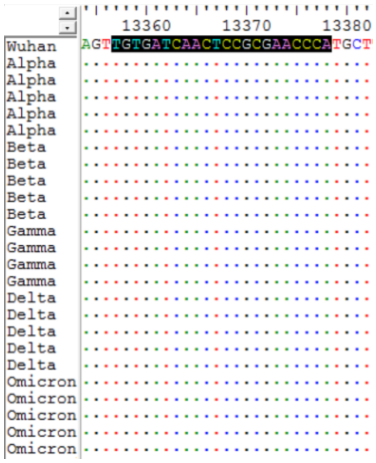
Target: Orf1ab

Oligo: F



Target: Orf1ab

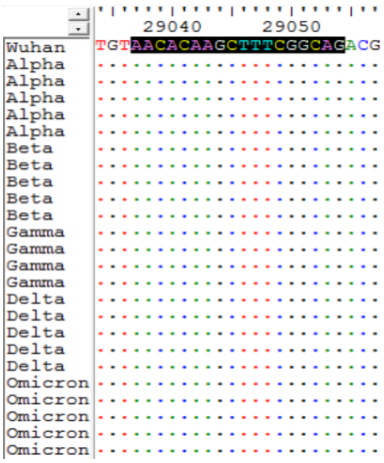
Oligo: R (anti-sense)



Title: CRISPR/Cas12a-mediated gold nanoparticle aggregation for colorimetric detection of SARS-CoV-2

Target: N gene

Oligo: N_F3



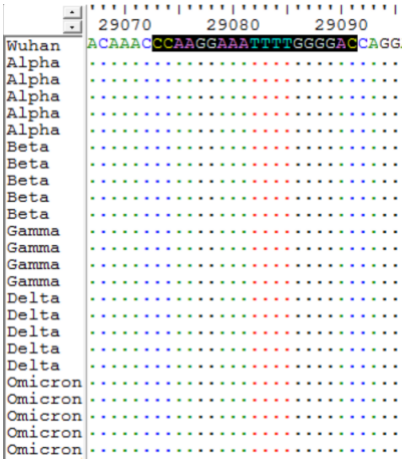
Target: N gene

Oligo: N_B3 (anti-sense)



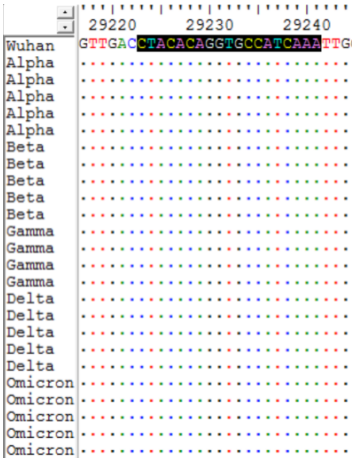
Target: N gene

Oligo: N_FIP



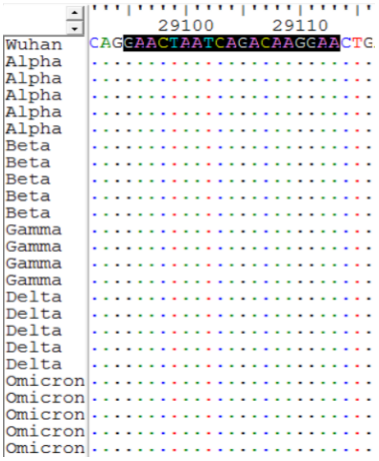
Target: N gene

Oligo: N_BIP (anti-sense)



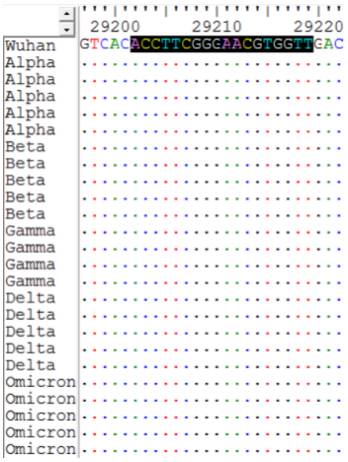
Target: N gene

Oligo: N-FL (anti-sense)



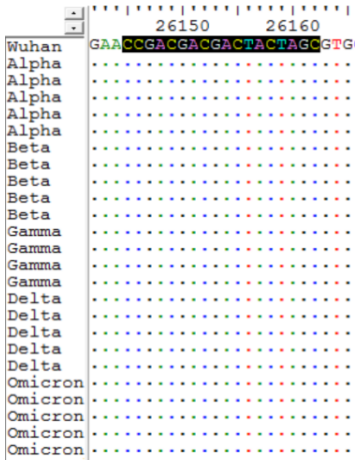
Target: N gene

Oligo: N-BL



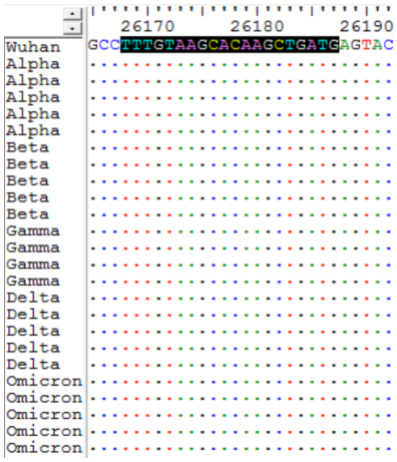
Target: E gene

Oligo: E_F3



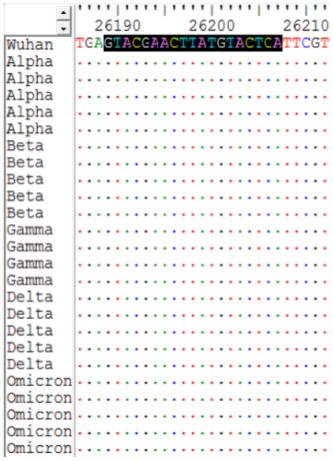
Target: E gene

Oligo: E_FIP



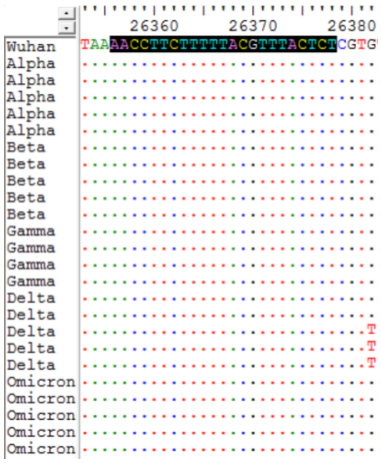
Target: E gene

Oligo: E_FL (anti-sense)



Target: E gene

Oligo: E_B3 (anti-sense)



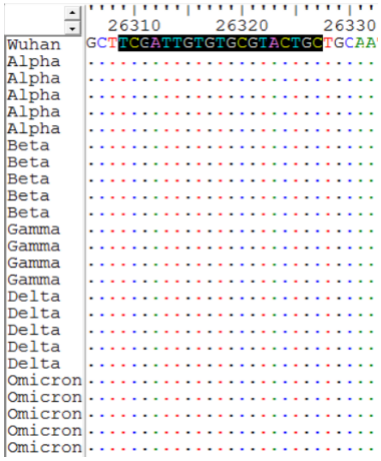
Target: E gene

Oligo: E_BIP (anti-sense)

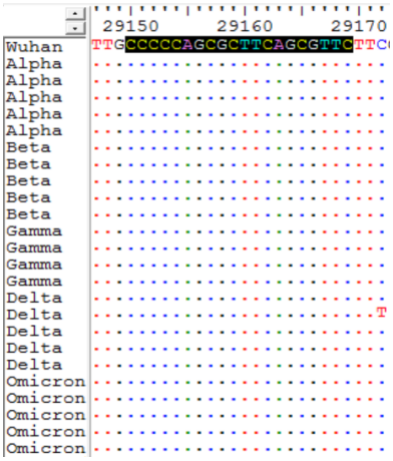


Target: E gene

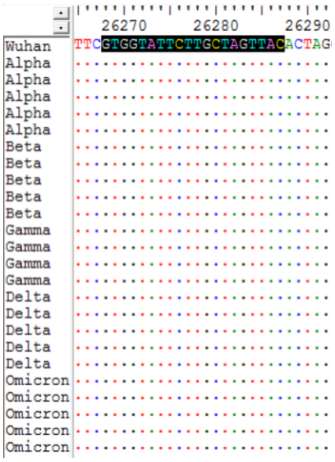
Oligo: E_BL



Target: N gene
Oligo: N-gRNA



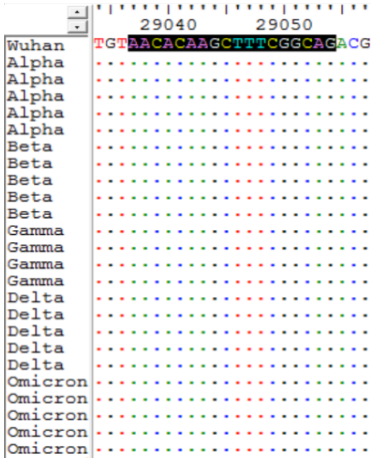
Target: E gene
Oligo: E-gRNA



Title: CRISPR-Cas12-based detection of SARS-CoV-2

Target: N gene

Oligo: F3 2019-nCoV N-gene



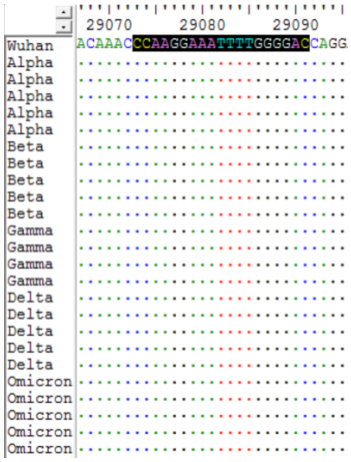
Target: N gene

Oligo: B3 2019-nCoV N-gene (anti-sense)



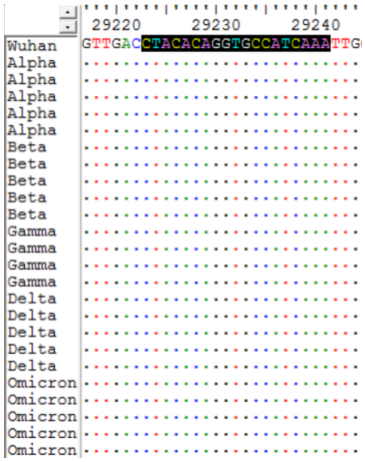
Target: N gene

Oligo: FIP 2019-nCoV N-gene



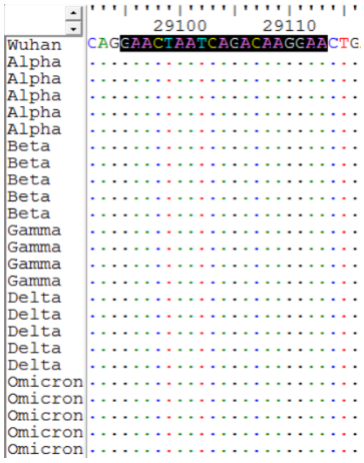
Target: N gene

Oligo: BIP 2019-nCoV N-gene (anti-sense)



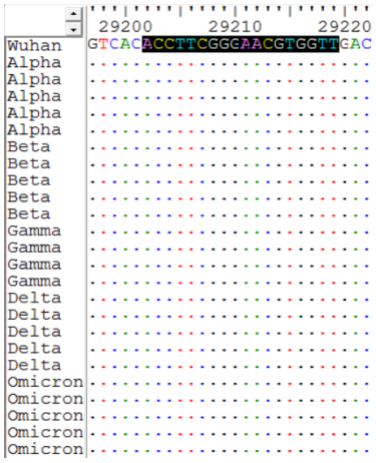
Target: N gene

Oligo: LF 2019-nCoV N-gene (anti-sense)

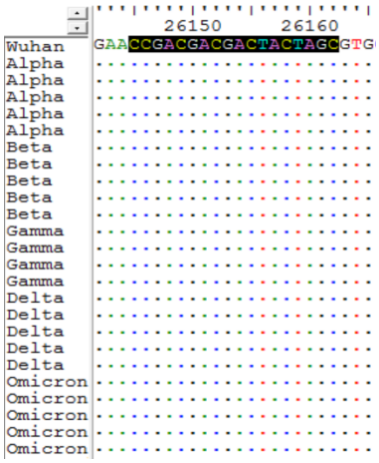


Target: N gene

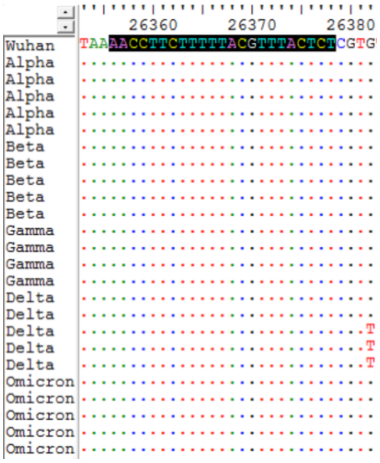
Oligo: LB 2019-nCoV N-gene



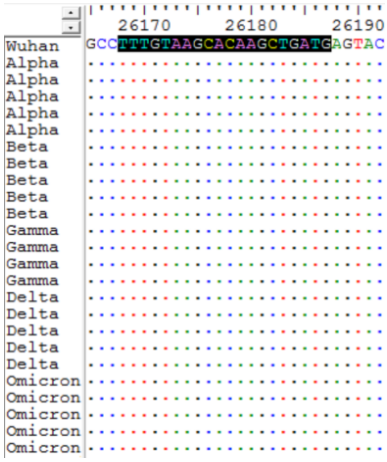
Target: E gene
Oligo: F3 2019-nCoV E-gene



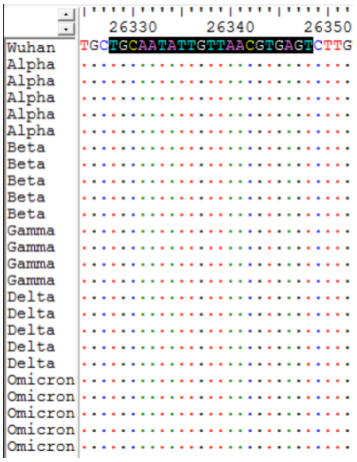
Target: E gene
Oligo: B3 2019-nCoV E-gene (anti-sense)



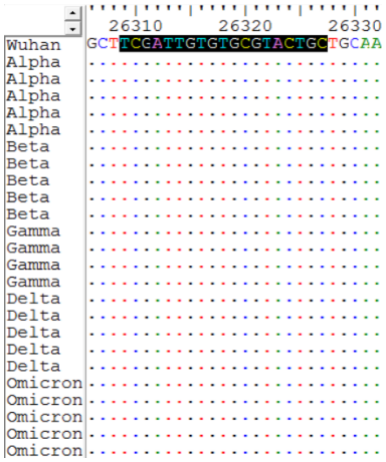
Target: E gene
Oligo: FIP 2019-nCoV E-gene



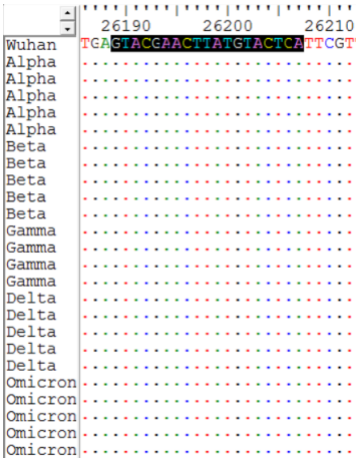
Target: E gene
Oligo: BIP 2019-nCoV E-gene (anti-sense)



Target: E gene
Oligo: LF 2019-nCoV E-gene

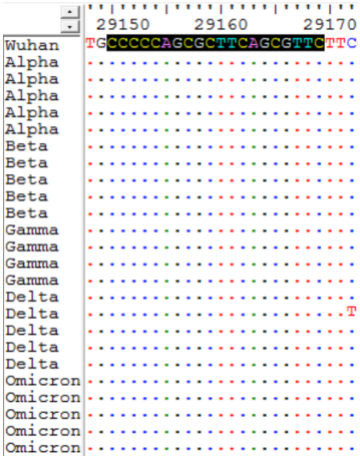


Target: E gene
Oligo: LB 2019-nCoV E-gene (anti-sense)



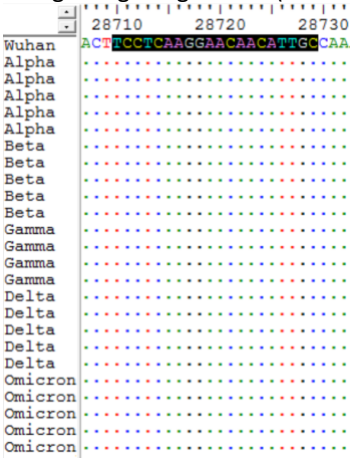
Target: N gene

Oligo: N-gene gRNA #1



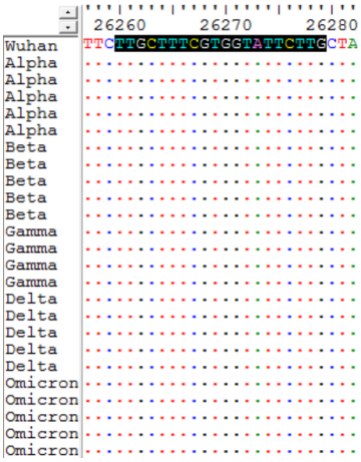
Target: N gene

Oligo: N-gene gRNA #2 (anti-sense)



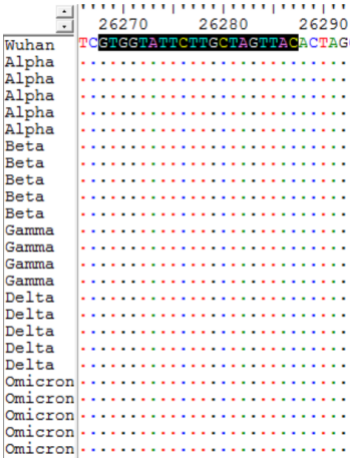
Target: E gene

Oligo: E-gene gRNA #1



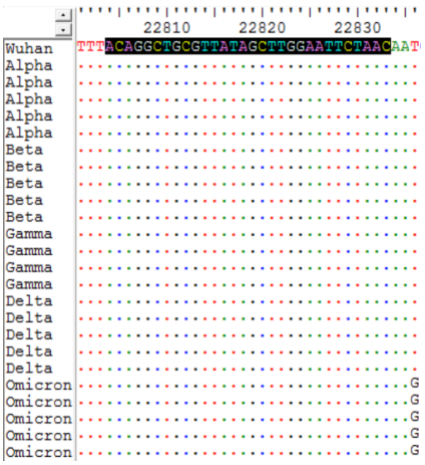
Target: E gene

Oligo: E-gene gRNA #2



Title: Detection of Infectious Viruses Using CRISPR-Cas12-Based Assay

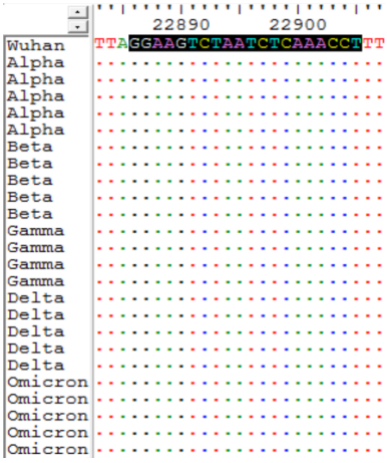
Target: S gene
Oligo: SARS-CoV-2 S FP



Target: S gene
Oligo: SARS-CoV-2 S RP



Target: S gene
Oligo: SARS-CoV-2 T1 gRNA



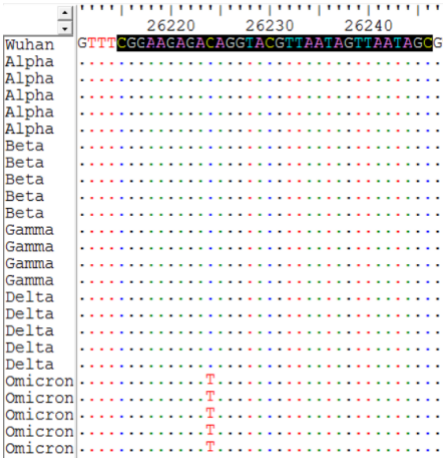
Target: S gene
Oligo: SARS-CoV-2 G2 gRNA



Title: Detection of SARS-CoV-2 by CRISPR/Cas12a-Enhanced Colorimetry

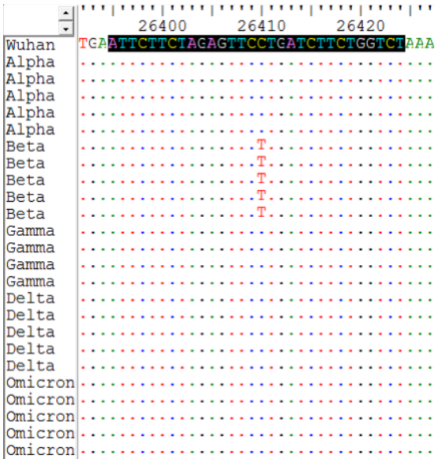
Target: E gene

Oligo: E-gene F



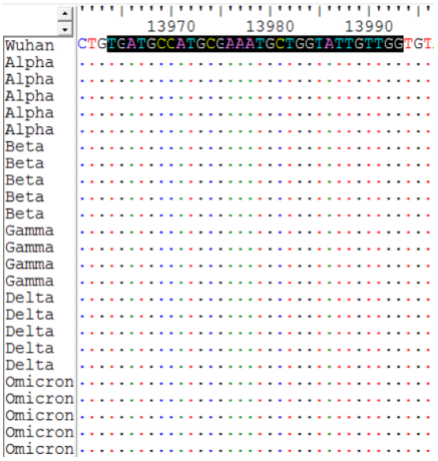
Target: E gene

Oligo: E-gene R (anti-sense)



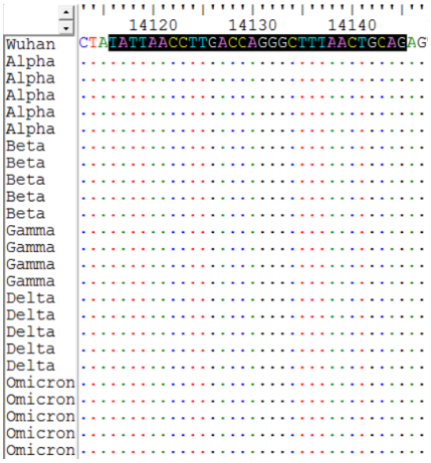
Target: Orf1ab

Oligo: O-gene F



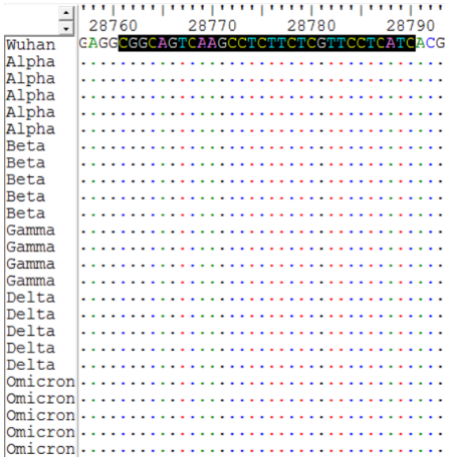
Target: Orf1ab

Oligo: O-gene R (anti-sense)



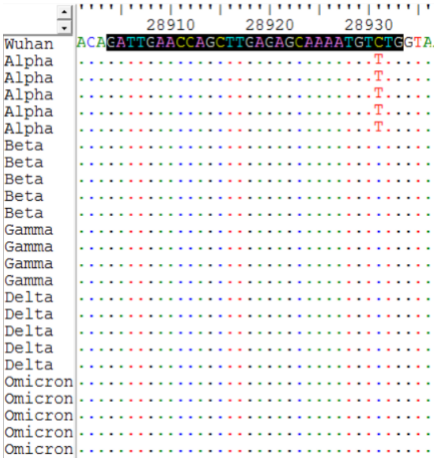
Target: N gene

Oligo: N-gene region1 F



Target: N gene

Oligo: N-gene region1 R (anti-sense)



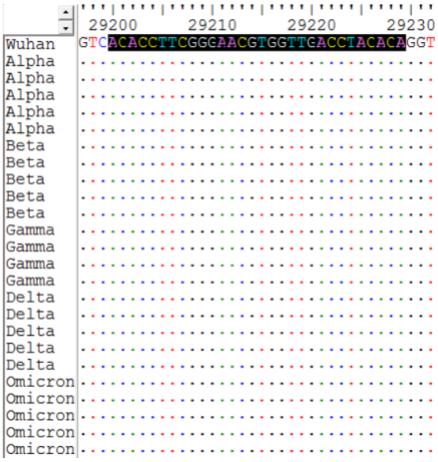
Target: N gene

Oligo: N-gene region2 F



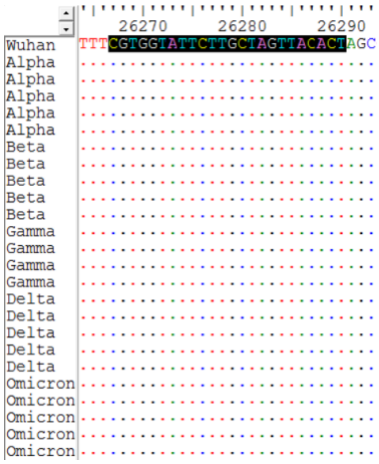
Target: N gene

Oligo: N-gene region2 R (anti-sense)



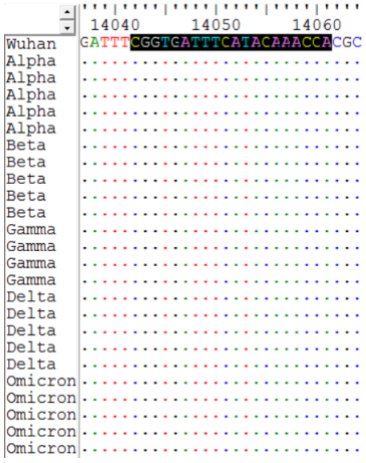
Target: E gene

Oligo: E-gene crRNA



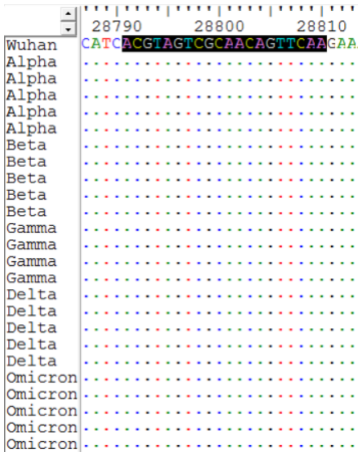
Target: Orf1ab

Oligo: O-gene crRNA



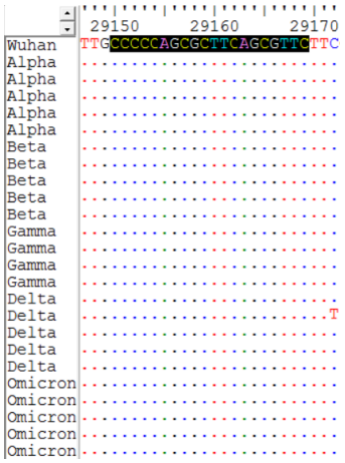
Target: N gene

Oligo: N-gene crRNA region 1 (anti-sense)



Target: N gene

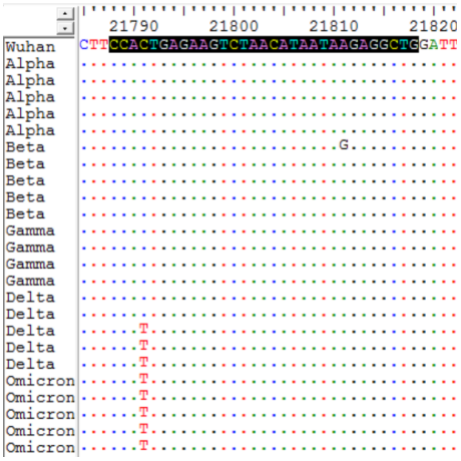
Oligo: N-gene crRNA region 2



Title: Detection of severe acute respiratory syndrome coronavirus 2 and influenza viruses based on CRISPR-Cas12a

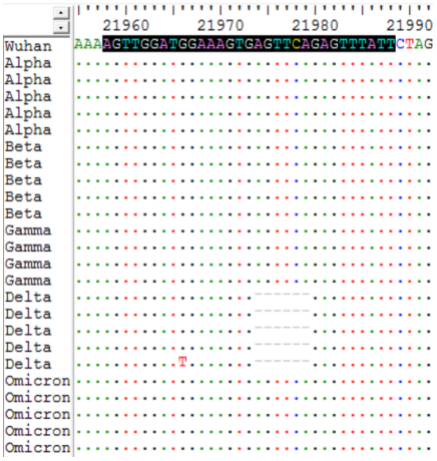
Target: S gene

Oligo: SARS2_spike1-F



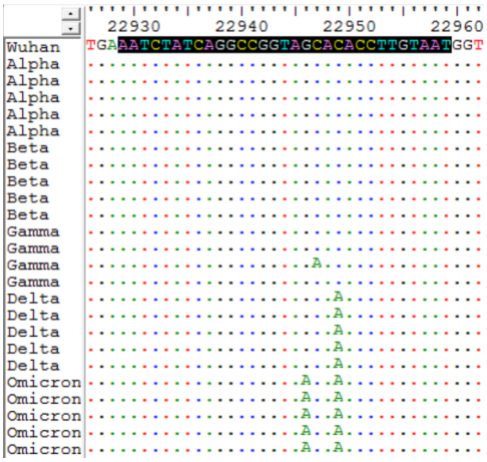
Target: S gene

Oligo: SARS2_spike1-R (anti-sense)



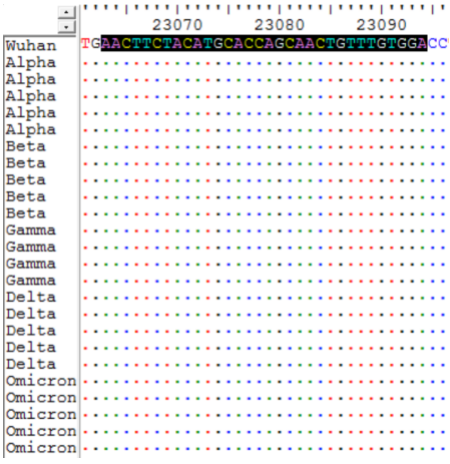
Target: S gene

Oligo: SARS2_spike2-F



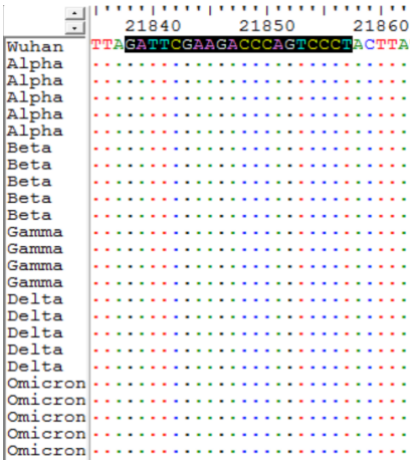
Target: S gene

Oligo: SARS2_spike2-R (anti-sense)



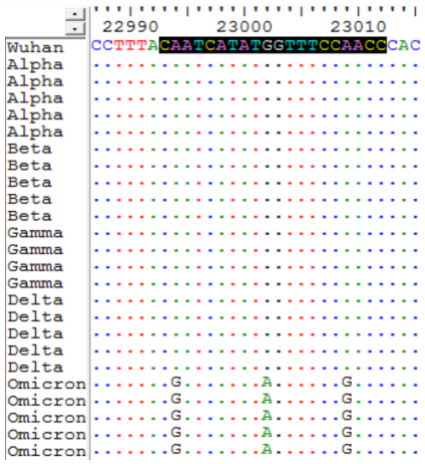
Target: S gene

Oligo: SARS2-S1



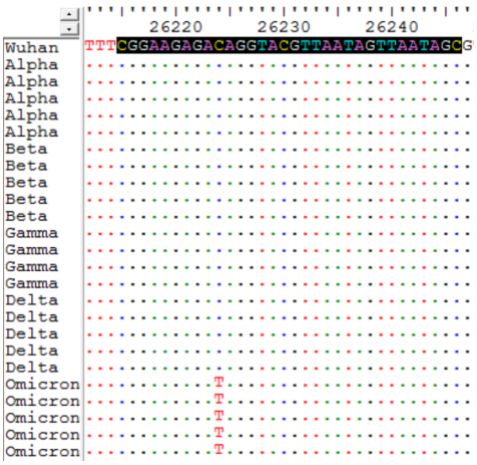
Target: S gene

Oligo: SARS2-S2

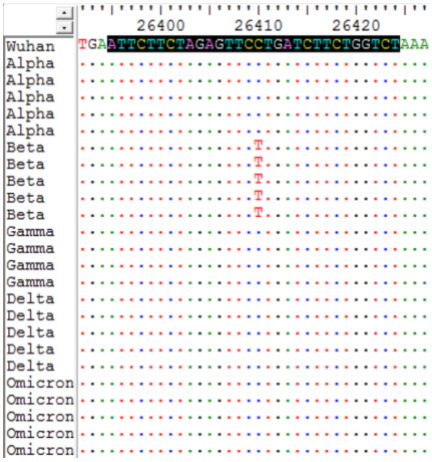


Title: Detection of the SARS-CoV-2 D614G mutation using engineered Cas12a guide RNA

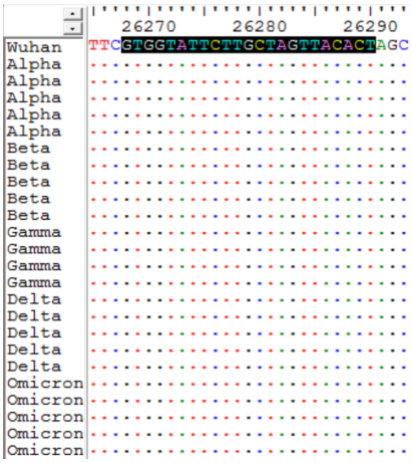
Target: E gene
Oligo: E-RPA-F



Target: E gene
Oligo: E-RPA-R



Target: E gene
Oligo: core E gene

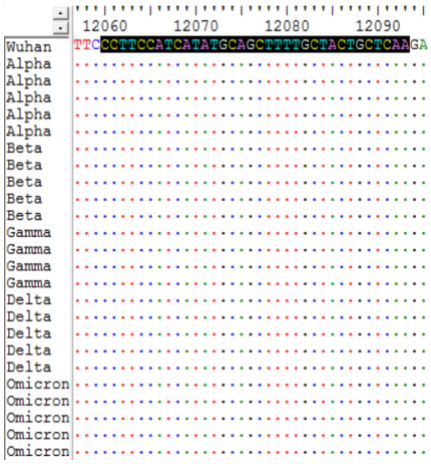


Title: Development and evaluation of a rapid CRISPR-based diagnostic for COVID-19

Target: Orf1ab
Oligo: forward primer



Target: Orf1ab
Oligo: reverse primer



Target: Orf1ab
Oligo: gRNA for Orf1ab (anti-sense)

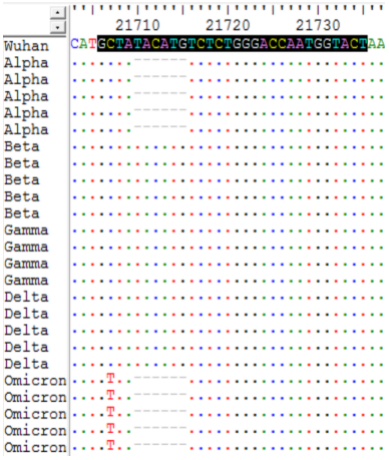


Title: Development of a Broadly Applicable Cas12a-Linked Beam Unlocking Reaction for Sensitive and Specific Detection of Respiratory Pathogens Including SARS-CoV-2

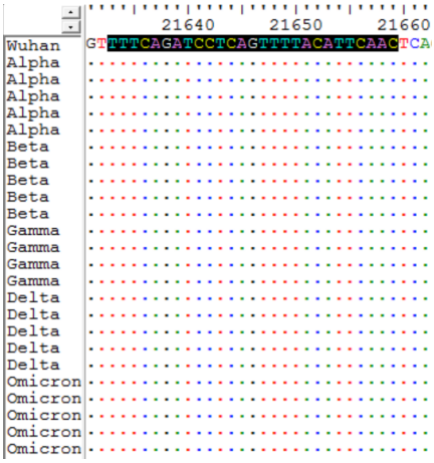
Target: S gene
Oligo: SARSCoV2-S-FWD-1



Target: S gene
Oligo: SARSCoV2-S-REV-1 (anti-sense)



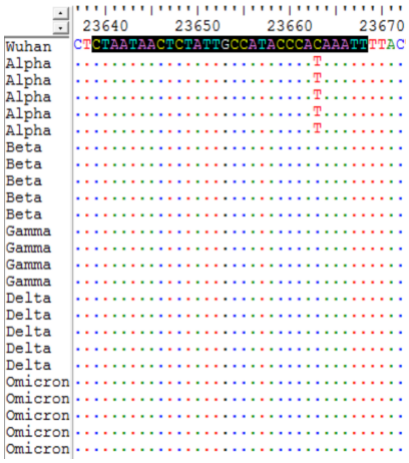
Target: S gene
Oligo: SARSCoV2-S-crRNA2



Title: Development of a Rapid and Sensitive CasRx-Based Diagnostic Assay for SARS-CoV-2

Target: S gene

Oligo: RPA-S3-F



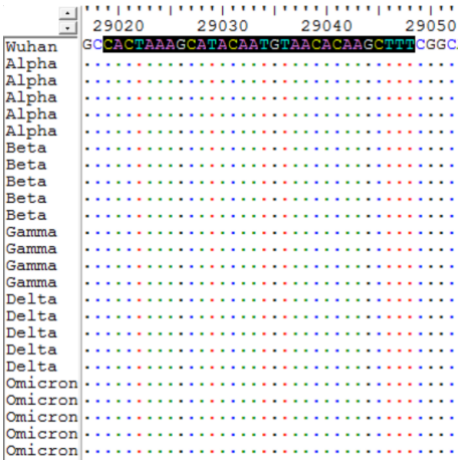
Target: S gene

Oligo: RPA-S3-R (anti-sense)



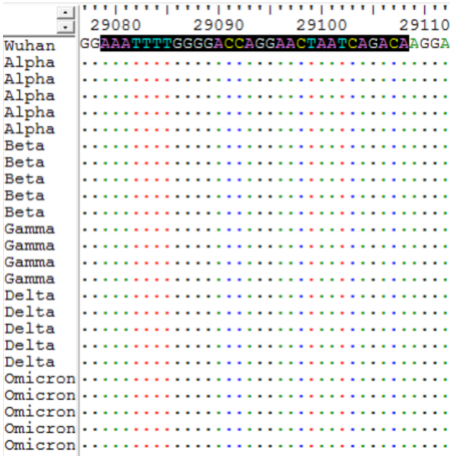
Target: N gene

Oligo: RPA-N1-F



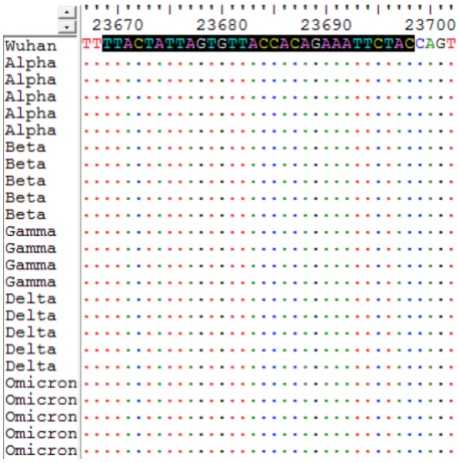
Target: N gene

Oligo: RPA-N1-R (anti-sense)



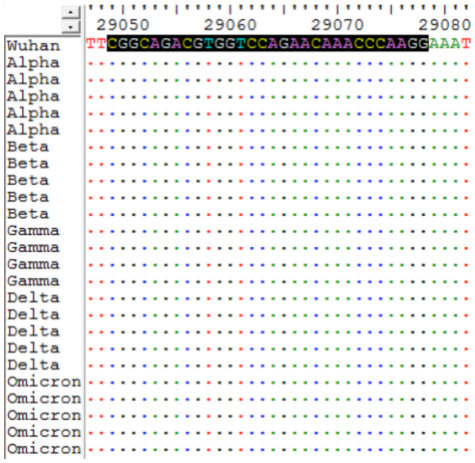
Target: S gene

Oligo: gRNA S3 (anti-sense)



Target: N gene

Oligo: gRNA N1 (anti-sense)



Title: Digital CRISPR/Cas-Assisted Assay for Rapid and Sensitive Detection of SARS-CoV-2

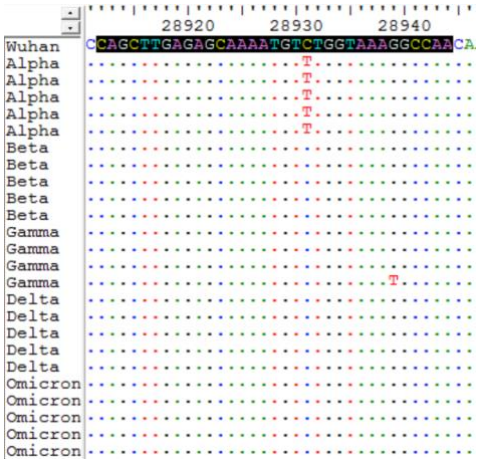
Target: N gene

Oligo: RPA Forward primer



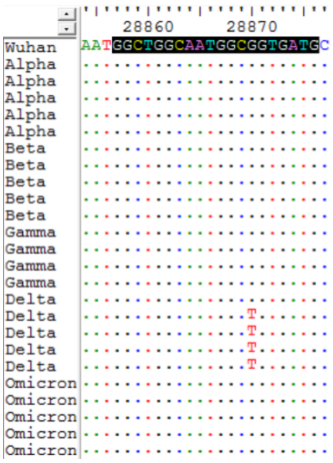
Target: N gene

Oligo: RPA Reverse primer (anti-sense)



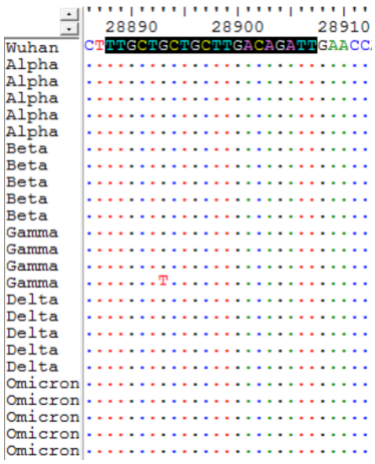
Target: N gene

Oligo: Lba Cas12a-guide RNA1 (anti-sense)



Target: N gene

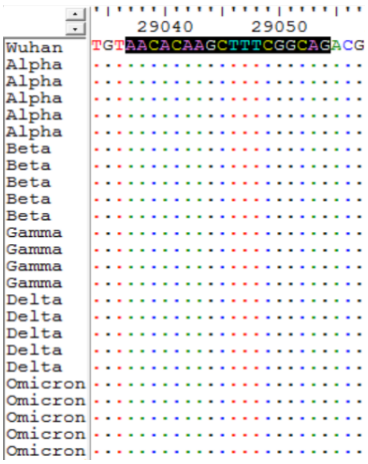
Oligo: Lba Cas12a-guide RNA2



Title: Electric field-driven microfluidics for rapid CRISPR-based diagnostics and its application to detection of SARS-CoV-2

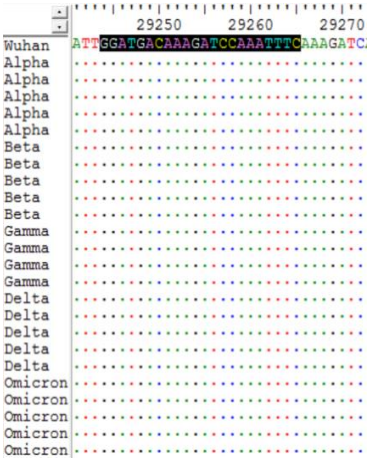
Target: N gene

Oligo: N-gene F3



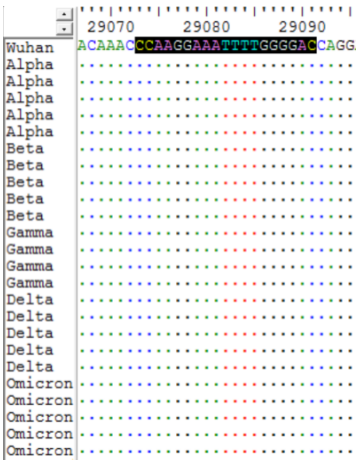
Target: N gene

Oligo: N-gene B3



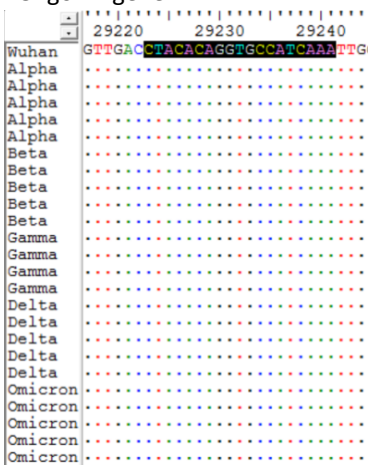
Target: N gene

Oligo: N-gene FIP



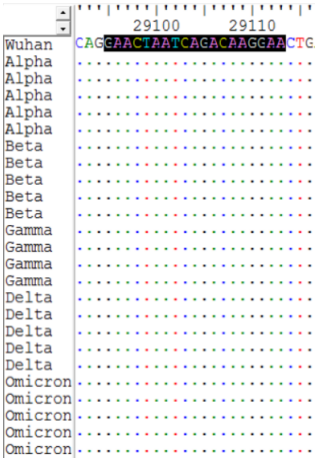
Target: N gene

Oligo: N-gene BIP



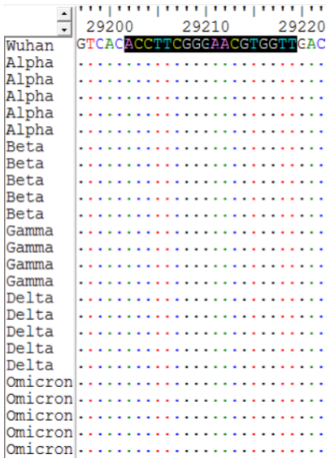
Target: N gene

Oligo: N gene-FL (anti-sense)

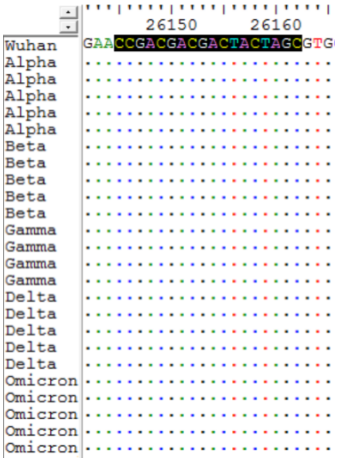


Target: N gene

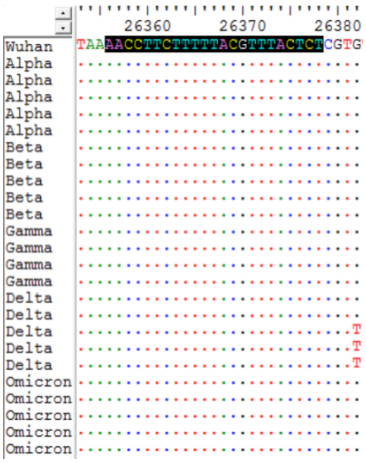
Oligo: N gene-BL



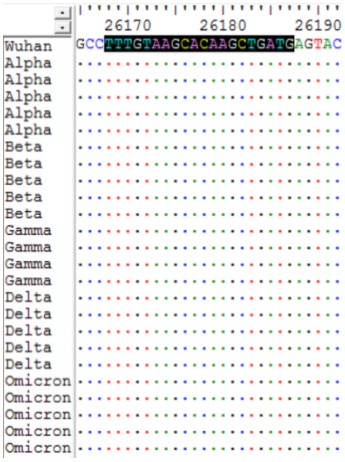
Target: E gene
Oligo: E gene_F3



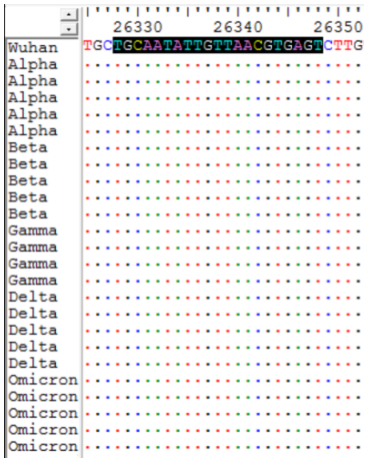
Target: E gene
Oligo: E gene_B3 (anti-sense)



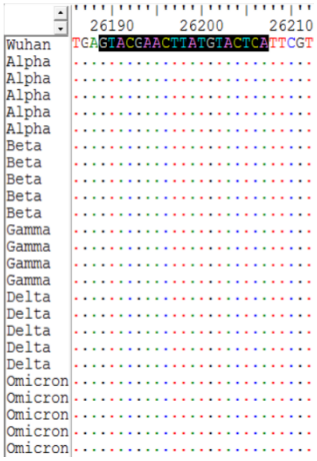
Target: E gene
Oligo: E gene_FIP



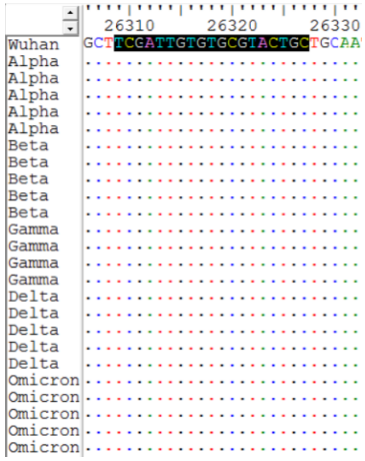
Target: E gene
Oligo: E gene_BIP (anti-sense)



Target: E gene
Oligo: E gene_FL (anti-sense)

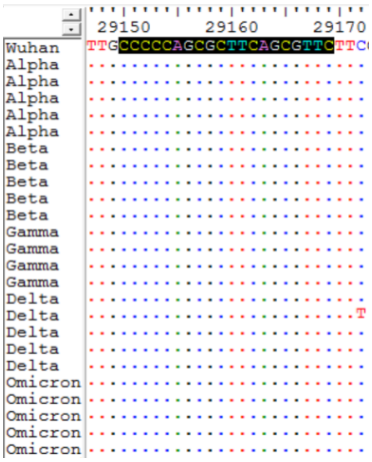


Target: E gene
Oligo: E gene_BL



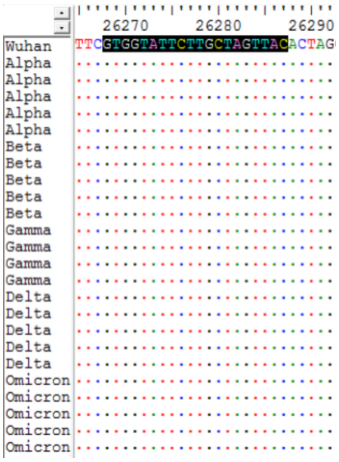
Target: N gene

Oligo: N gene-gRNA



Target: E gene

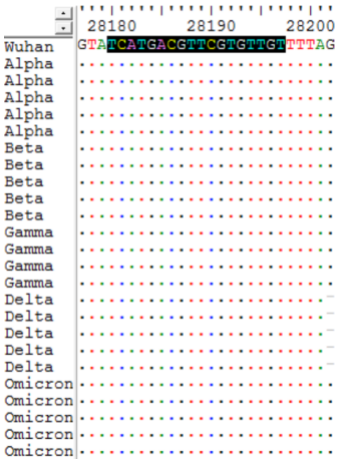
Oligo: E gene-gRNA



Title: Enhancement of trans-cleavage activity of Cas12a with engineered crRNA enables amplified nucleic acid detection

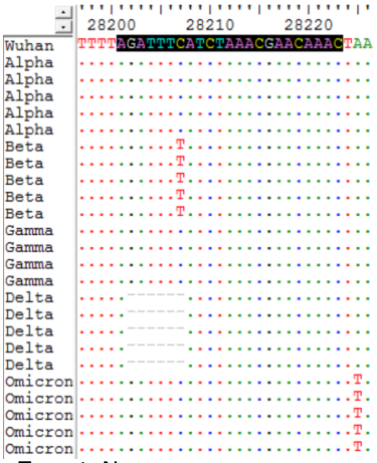
Target: N gene

Oligo: F3_LAMP_N1



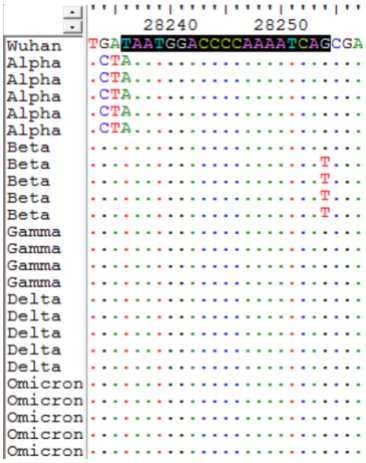
Target: N gene

Oligo: FIP_LAMP_N1



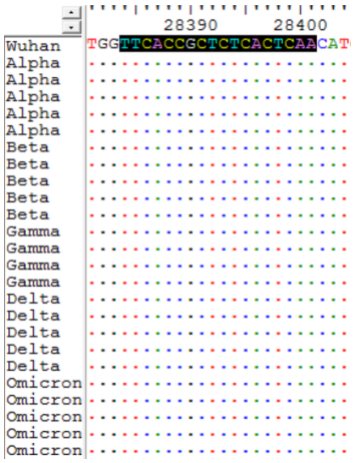
Target: N gene

Oligo: LF_LAMP_N1 (anti-sense)



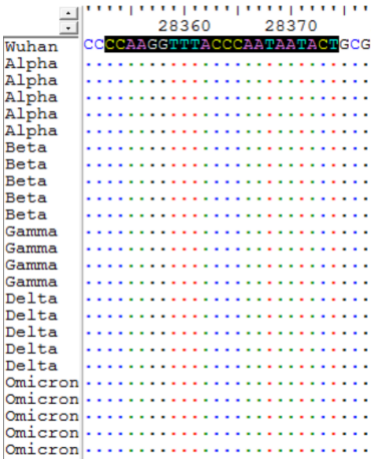
Target: N gene

Oligo: B3_LAMP_N1 (anti-sense)



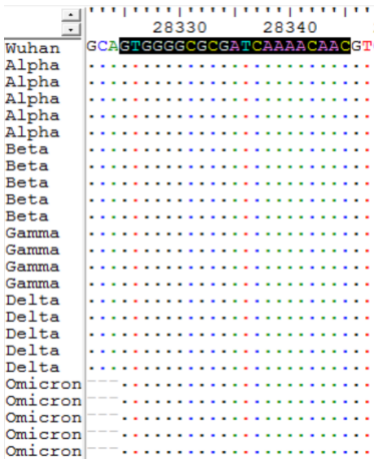
Target: N gene

Oligo: BIP_LAMP_N1 (anti-sense)

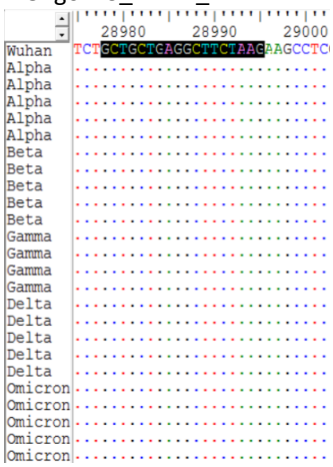


Target: N gene

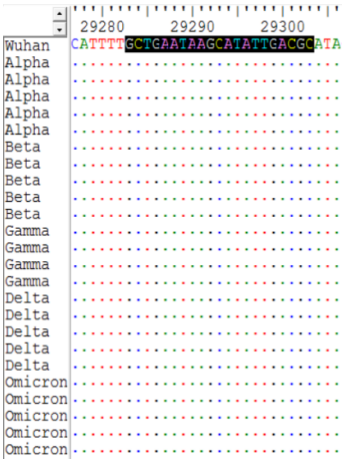
Oligo: LB_LAMP_N1



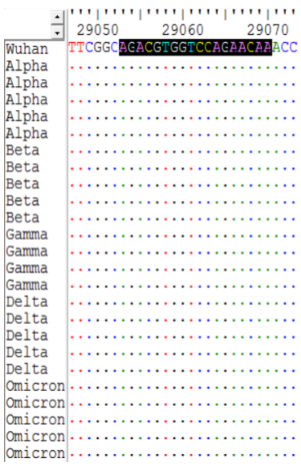
Target: N gene
Oligo: F3_LAMP_N2



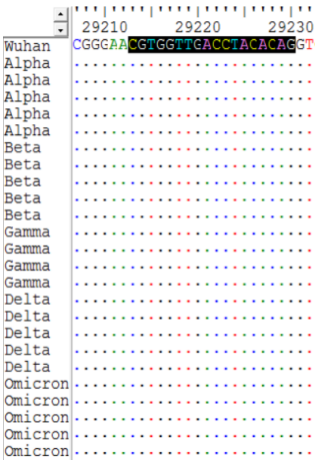
Target: N gene
Oligo: B3_LAMP_N2 (anti-sense)



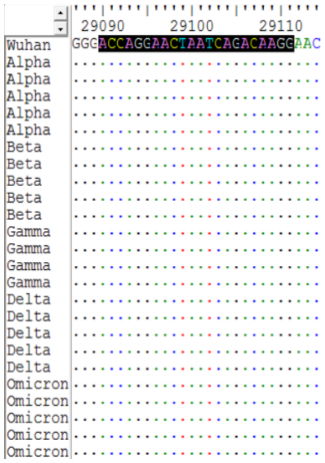
Target: N gene
Oligo: FIP_LAMP_N2



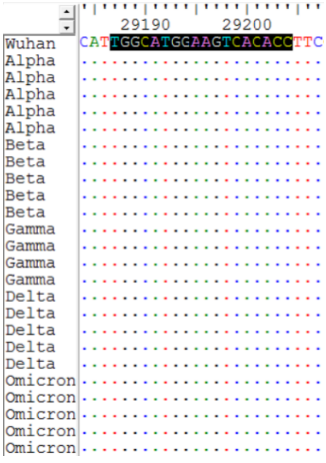
Target: N gene
Oligo: BIP_LAMP_N2 (anti-sense)



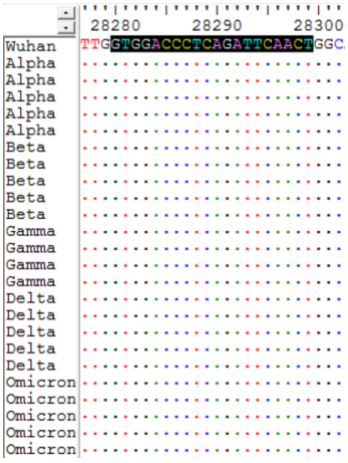
Target: N gene
Oligo: LF_LAMP_N2 (anti-sense)



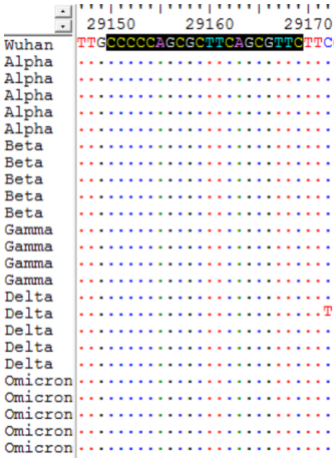
Target: N gene
Oligo: LB_LAMP_N2



Target: N gene
Oligo: N1 crRNA



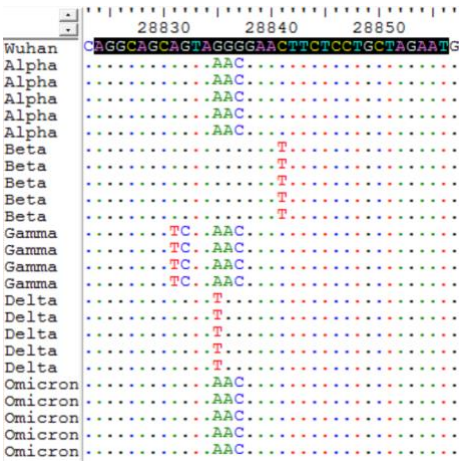
Target: N gene
Oligo: N2 crRNA (anti-sense)



Title: Fluorescence polarization system for rapid COVID-19 diagnosis

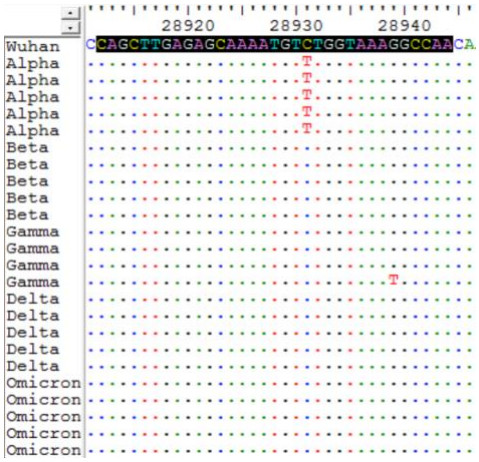
Target: N gene

Oligo: N1-Forward RPA primer



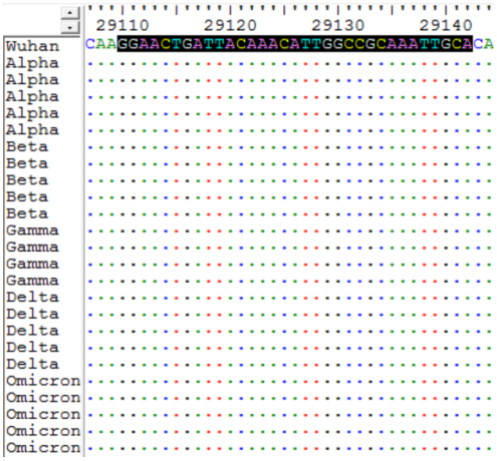
Target: N gene

Oligo: N1-Reverse RPA primer (anti-sense)



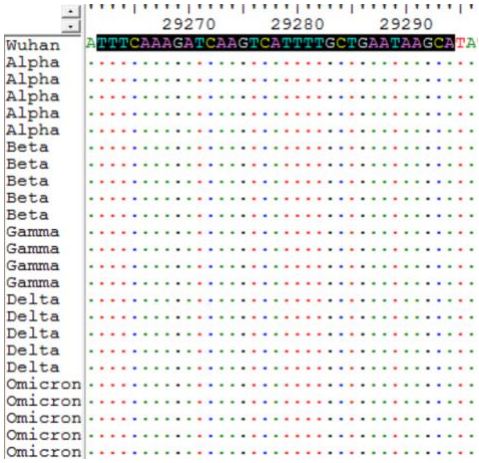
Target: N gene

Oligo: N2-Forward RPA primer



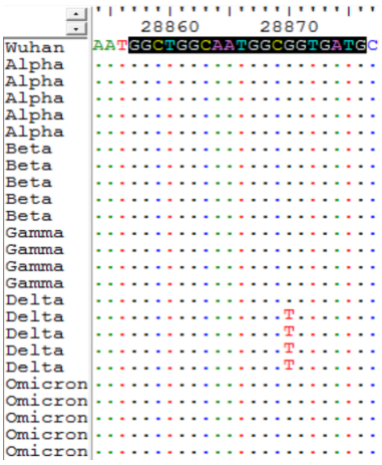
Target: N gene

Oligo: N2-Reverse RPA primer (anti-sense)



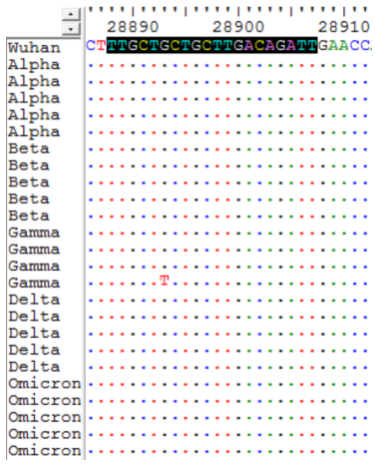
Target: N gene

Oligo: N1-Forward Cas12a gRNA (anti-sense)



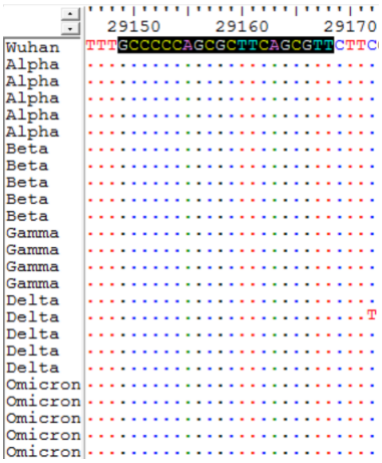
Target: N gene

Oligo: N1-Reverse Cas12a gRNA



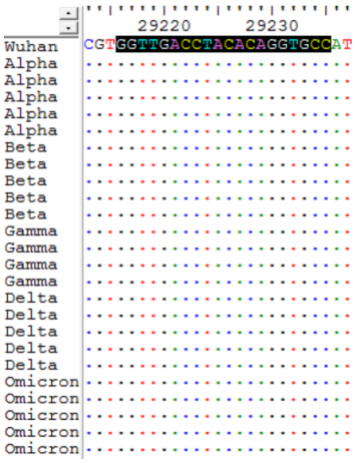
Target: N gene

Oligo: N2-Forward Cas12a gRNA (anti-sense)



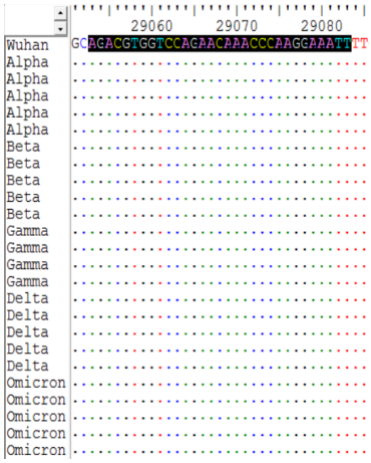
Target: N gene

Oligo: N2-Reverse Cas12a gRNA

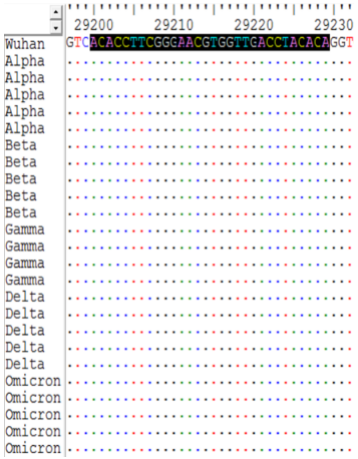


Title: Instrument-free, CRISPR-based diagnostics of SARS-CoV-2 using self-contained microfluidic system

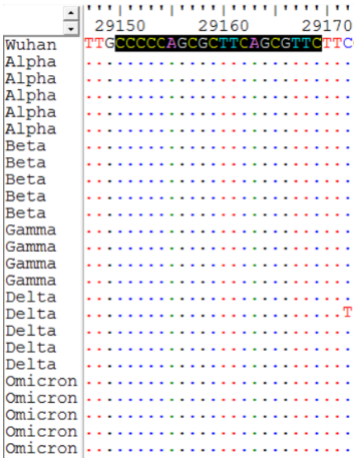
Target: N gene
Oligo: FP_SARS-CoV-2



Target: N gene
Oligo: RP_SARS-CoV-2 (anti-sense)



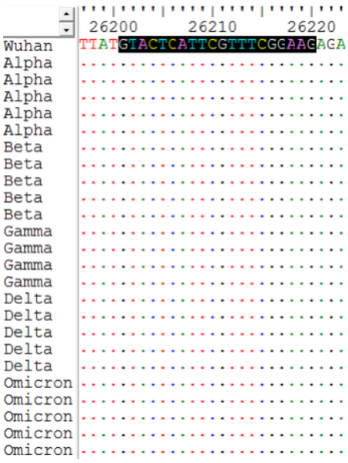
Target: N gene
Oligo: LbCas12a-crRNA-SARS-CoV-2



Title: iSCAN: An RT-LAMP-coupled CRISPR-Cas12 module for rapid, sensitive detection of SARS-CoV-2

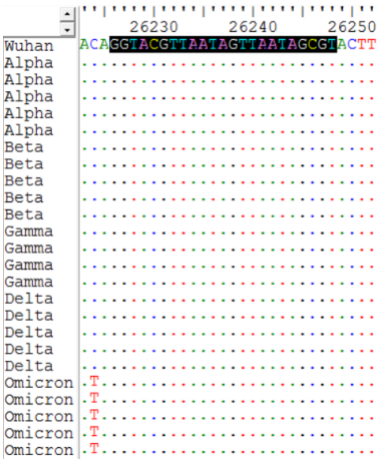
Target: N gene

Oligo: F3-E-2



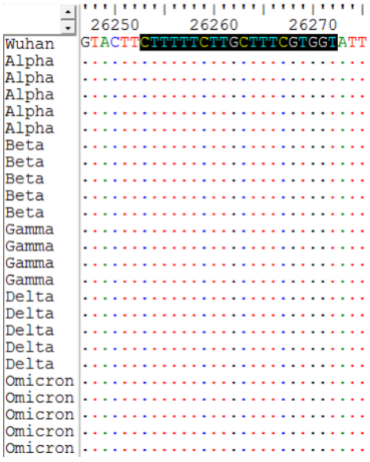
Target: N gene

Oligo: FIP-E-2



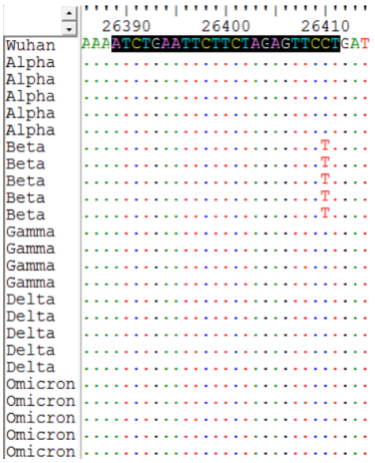
Target: N gene

Oligo: LF-E-2 (anti-sense)



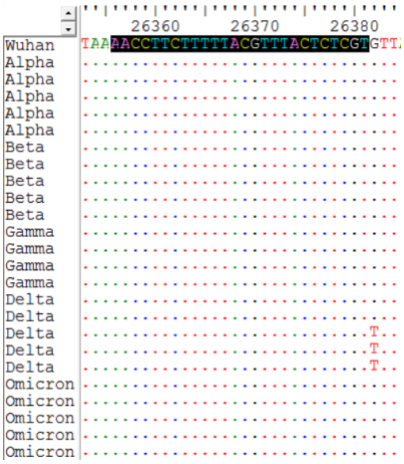
Target: N gene

Oligo: B3-E-1 (anti-sense)



Target: N gene

Oligo: BIP-E-2 (anti-sense)



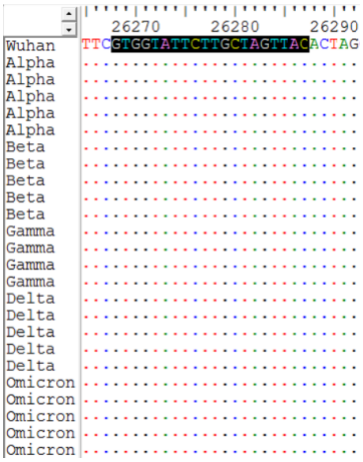
Target: N gene

Oligo: LB-E-1



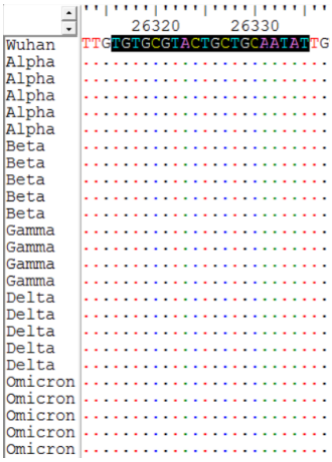
Target: E gene

Oligo: LbCas12a (anti-sense)



Target: E gene

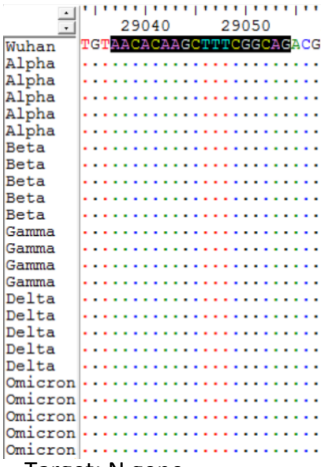
Oligo: Cas12b (anti-sense)



Title: Isothermal Amplification and Ambient Visualization in a Single Tube for the Detection of SARS-CoV-2 Using Loop-Mediated Amplification and CRISPR Technology

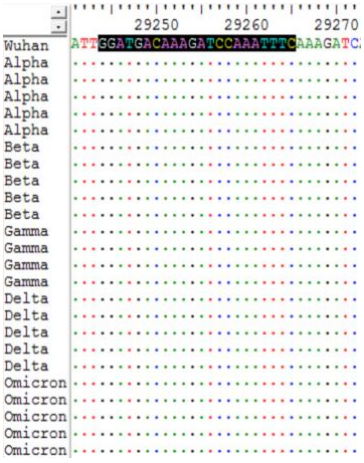
Target: N gene

Oligo: N-gene F3



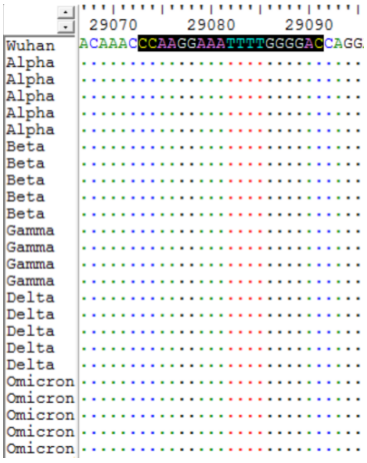
Target: N gene

Oligo: N-gene B3



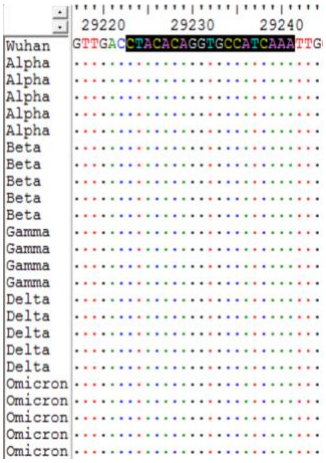
Target: N gene

Oligo: N-gene FIP



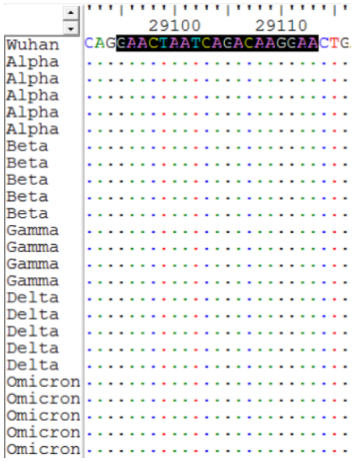
Target: N gene

Oligo: N-gene BIP



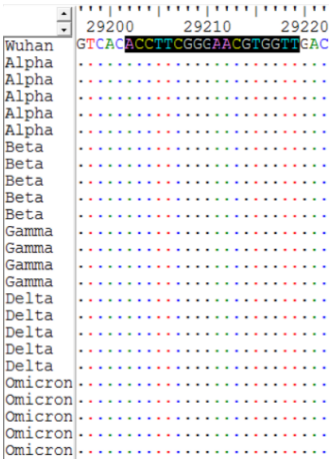
Target: N gene

Oligo: N gene-LF (anti-sense)



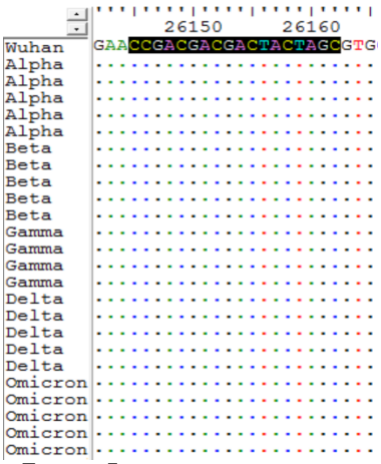
Target: N gene

Oligo: N gene-LB



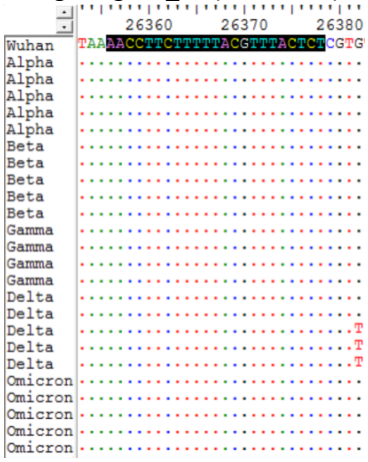
Target: E gene

Oligo: E gene_F3



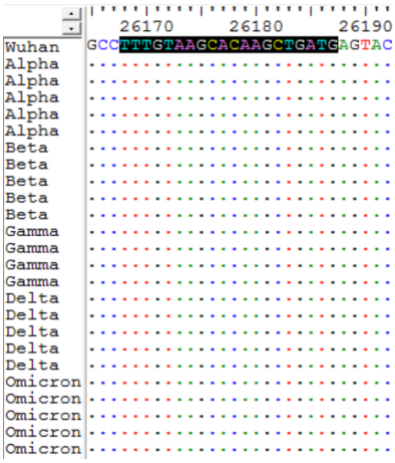
Target: E gene

Oligo: E gene_B3 (anti-sense)



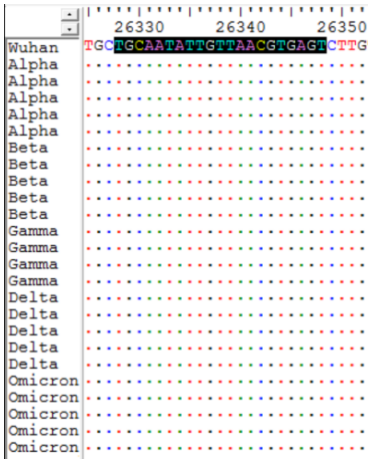
Target: E gene

Oligo: E gene_FIP



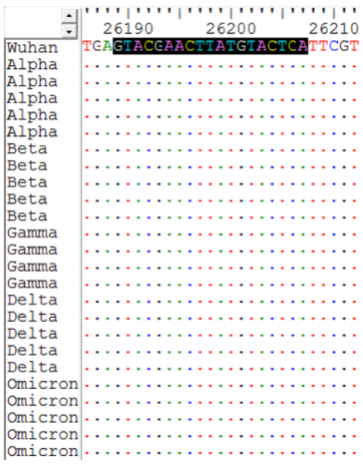
Target: E gene

Oligo: E gene_BIP (anti-sense)



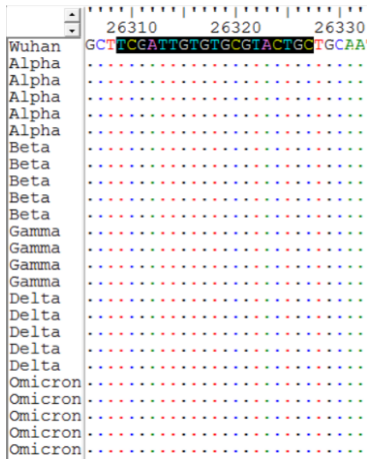
Target: E gene

Oligo: E gene_LF (anti-sense)



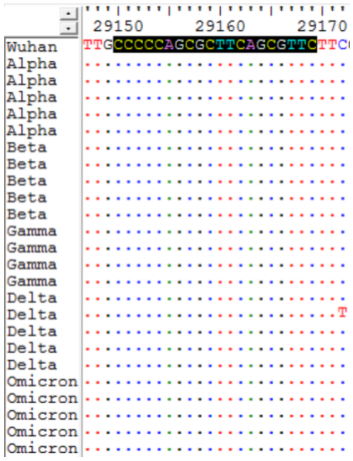
Target: E gene

Oligo: E gene_LB



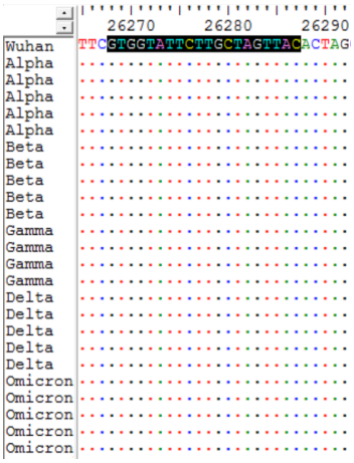
Target: N gene

Oligo: gRNA for the N gene



Target: E gene

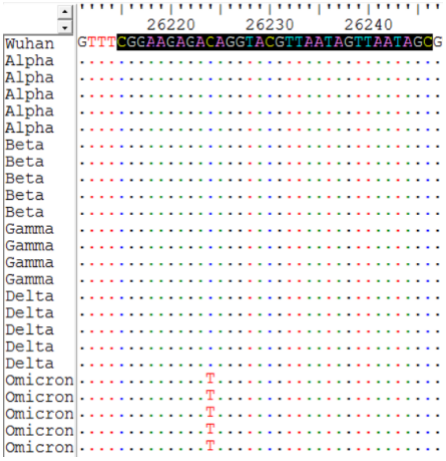
Oligo: gRNA for the E gene



Title: MeCas12a, a Highly Sensitive and Specific System for COVID-19 Detection

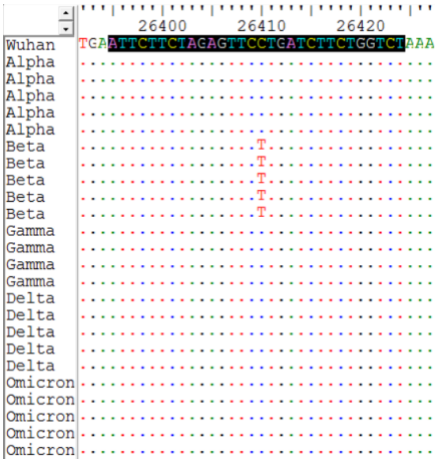
Target: E gene

Oligo: SC2-E-RPA-F



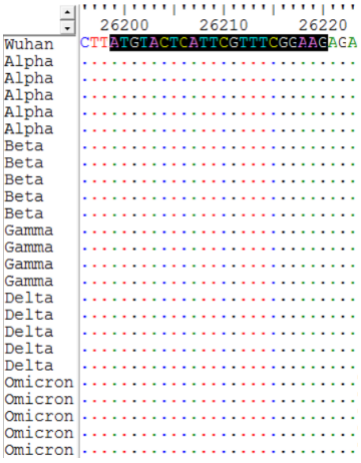
Target: E gene

Oligo: SC2-E-RPA-R (anti-sense)



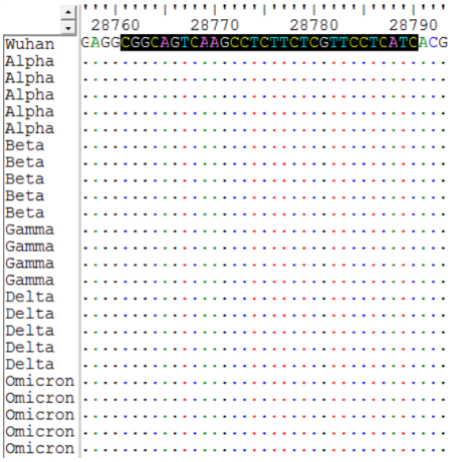
Target: E gene

Oligo: SC2-E-IVT-F



Title: Minimally instrumented SHERLOCK (miSHERLOCK) for CRISPR-based point-of-care diagnosis of SARS-CoV-2 and emerging variants

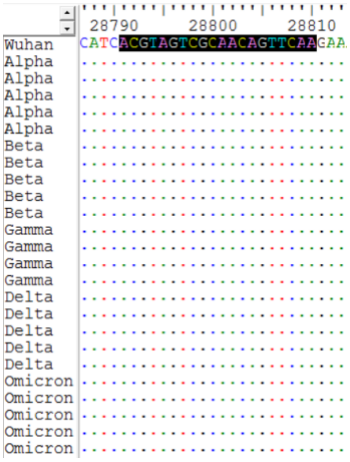
Target: N gene
Oligo: SARS-CoV-2 Nucleoprotein Forward Primer



Target: N gene
Oligo: SARS-CoV-2 Nucleoprotein Reverse Primer (anti-sense)



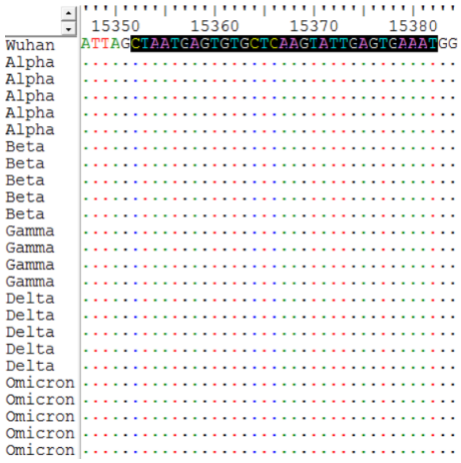
Target: N gene
Oligo: Nucleoprotein crRNA (anti-sense)



Title: One-tube SARS-CoV-2 detection platform based on RT-RPA and CRISPR/Cas12a

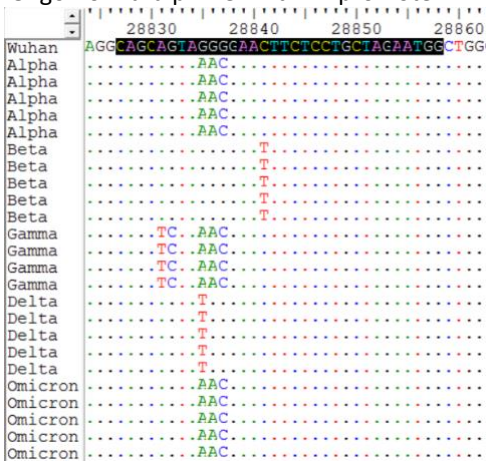
Target: RdRp gene

Oligo: forward primer with T7 promoter



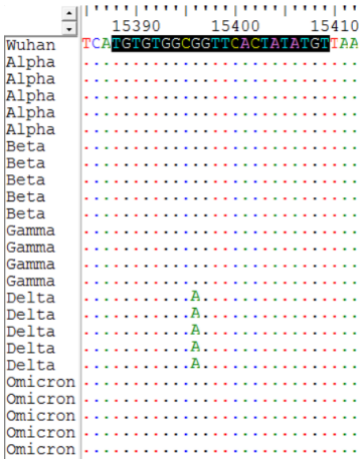
Target: N gene

Oligo: forward primer with T7 promoter



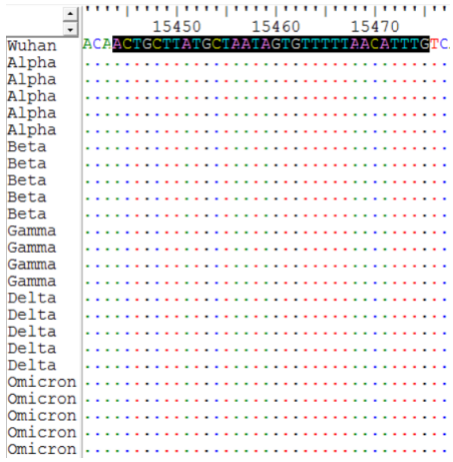
Target: RdRp gene

Oligo: crRNA for RdRp gene (anti-sense)



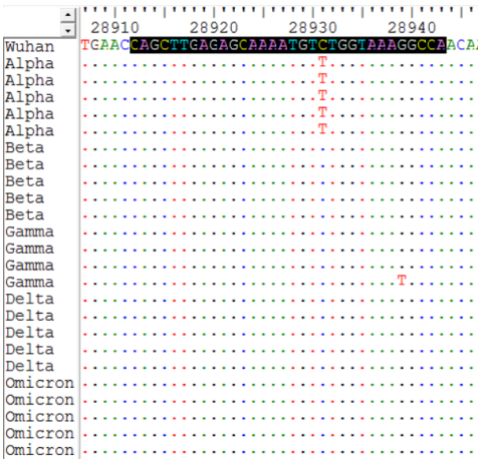
Target: RdRp gene

Oligo: reverse primer (anti-sense)



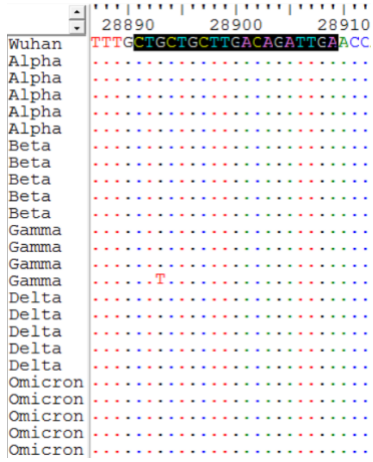
Target: N gene

Oligo: reverse primer (anti-sense)



Target: N gene

Oligo: crRNA for N gene



Title: Point-of-care CRISPR-Cas-assisted SARS-CoV-2 detection in an automated and portable droplet magnetofluidic device

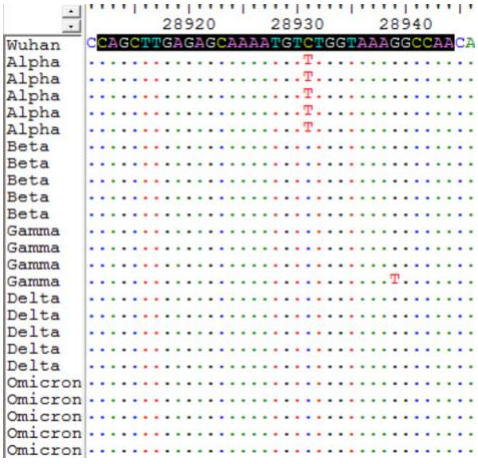
Target: N gene

Oligo: RPA Forward primer



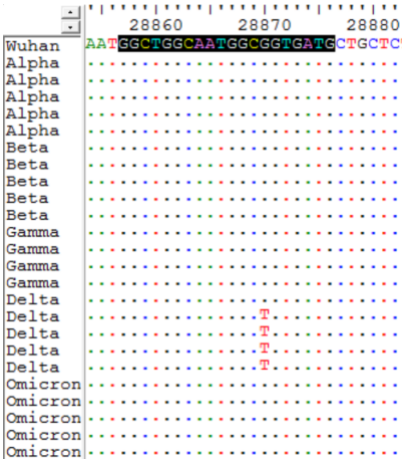
Target: N gene

Oligo: RPA Reverse primer (anti-sense)



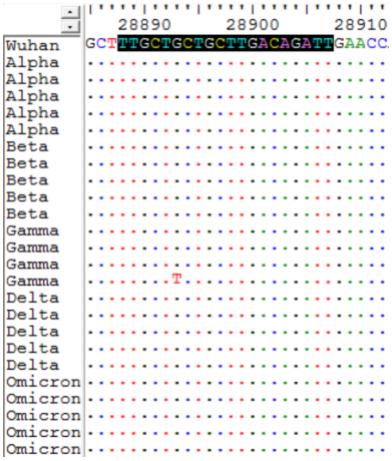
Target: N gene

Oligo: Cas12a-guide RNA1 (anti-sense)



Target: N gene

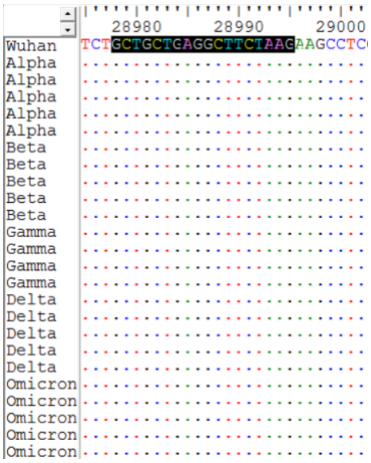
Oligo: Cas12a-guide RNA2



Title: Point-of-care testing for COVID-19 using SHERLOCK diagnostics

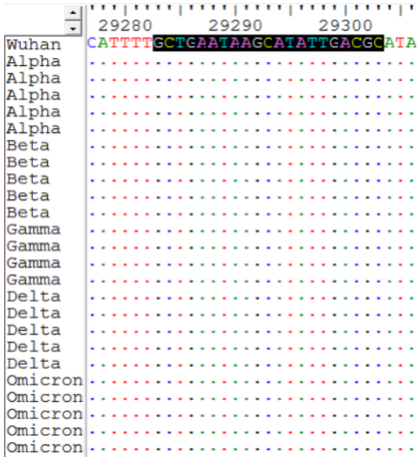
Target: N gene

Oligo: F3



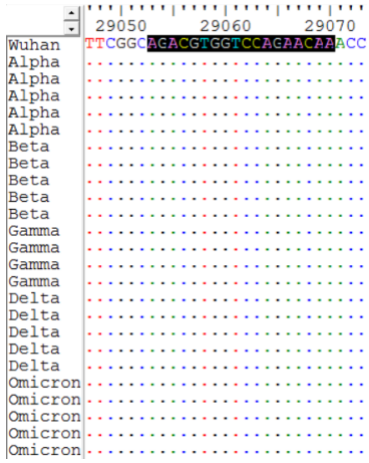
Target: N gene

Oligo: B3 (anti-sense)



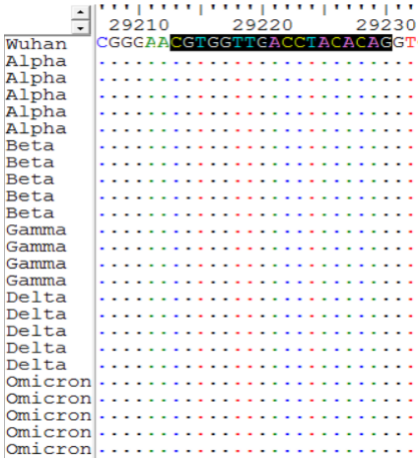
Target: N gene

Oligo: FIP



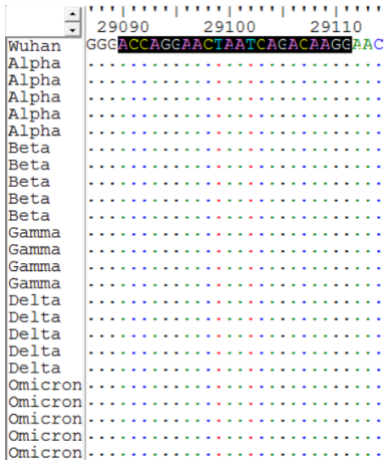
Target: N gene

Oligo: BIP (anti-sense)



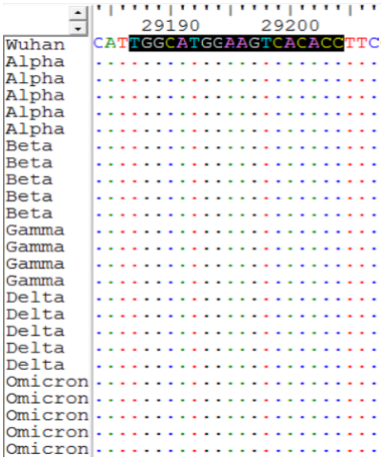
Target: N gene

Oligo: Loop Forward (anti-sense)



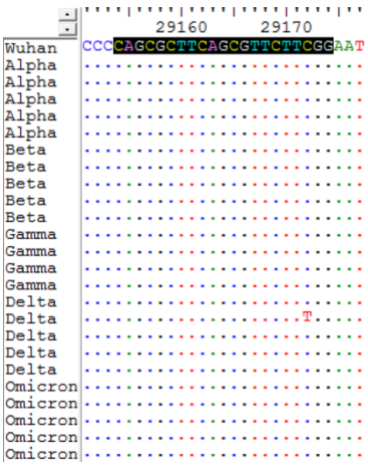
Target: N gene

Oligo: Loop Reverse



Target: N gene

Oligo: AapCas12b Guide RNA



Title: Rapid and sensitive detection of COVID-19 using CRISPR/Cas12a-based detection with naked eye readout, CRISPR/Cas12a-NER

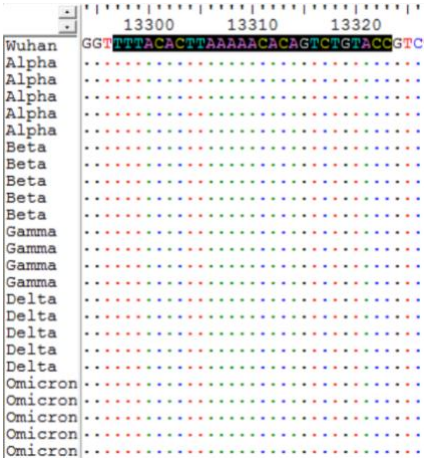
Target: Orf1a

Oligo: orf1a-RPA-F



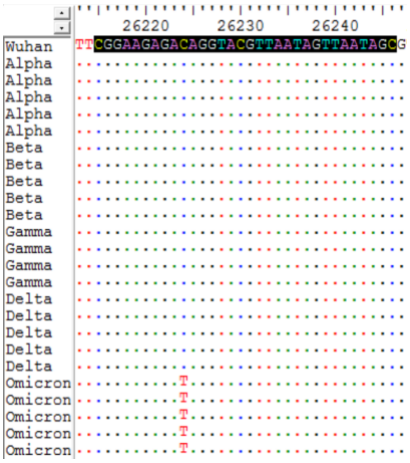
Target: Orf1b

Oligo: orf1b-RPA-F



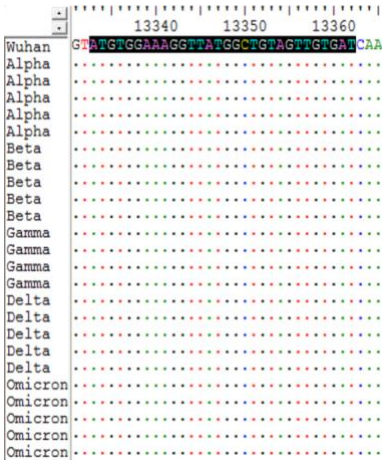
Target: E gene

Oligo: E-RPA-F



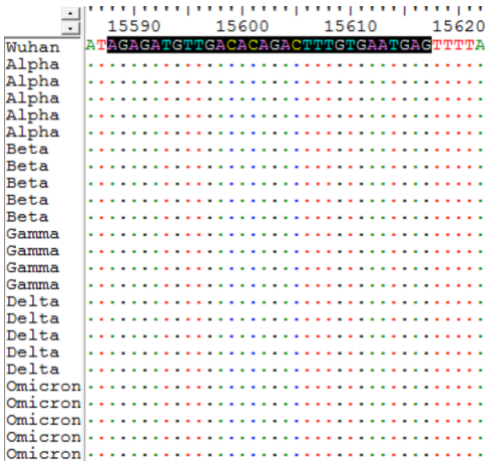
Target: Orf1a

Oligo: orf1a-RPA-R



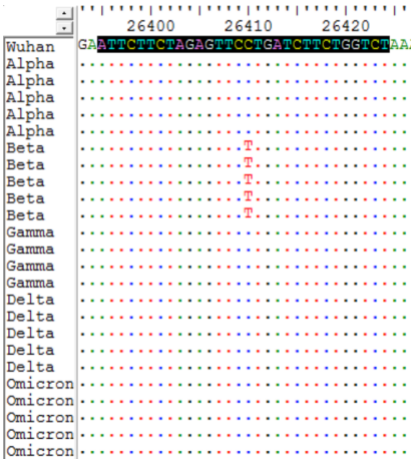
Target: Orf1b

Oligo: orf1b-RPA-R

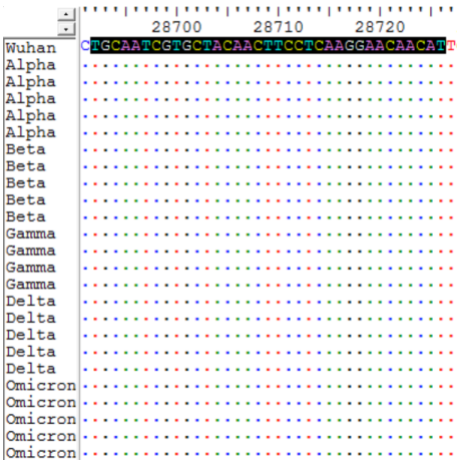


Target: E gene

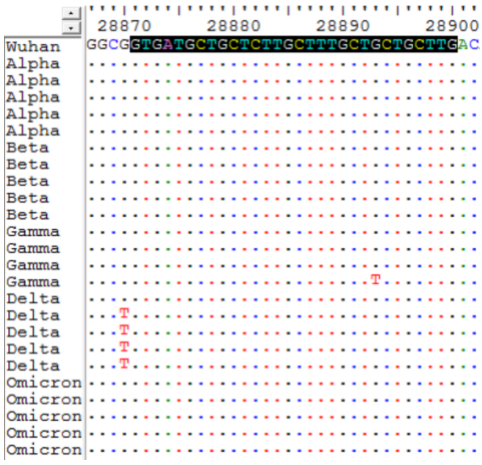
Oligo: E-RPA-R (anti-sense)



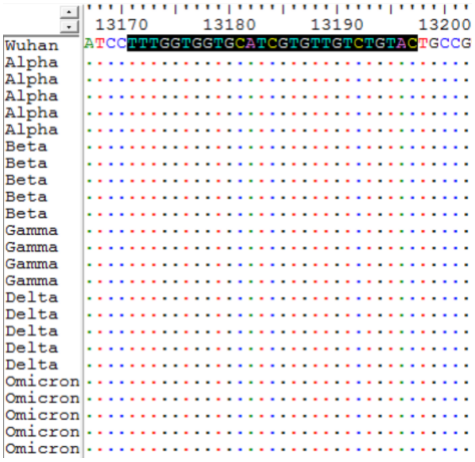
Target: N gene
Oligo: N-RPA-F



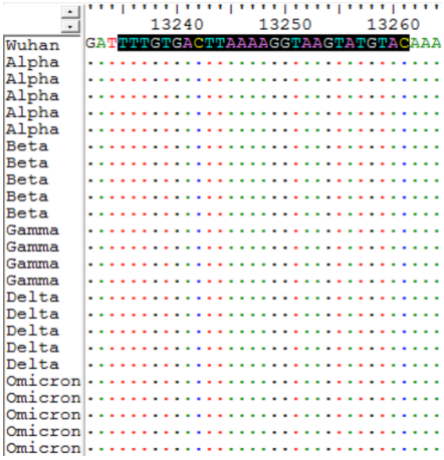
Target: N gene
Oligo: N-RPA-R



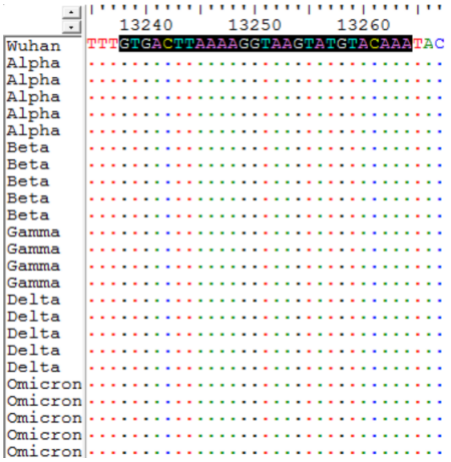
Target: Orf1a
Oligo: orf1a-crRNA1



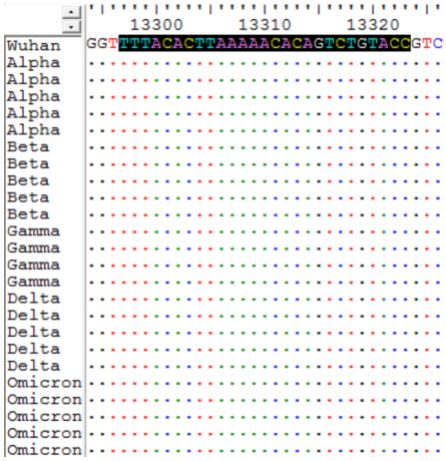
Target: Orf1a
Oligo: orf1a-crRNA2



Target: Orf1a
Oligo: orf1a-crRNA3 (anti-sense)

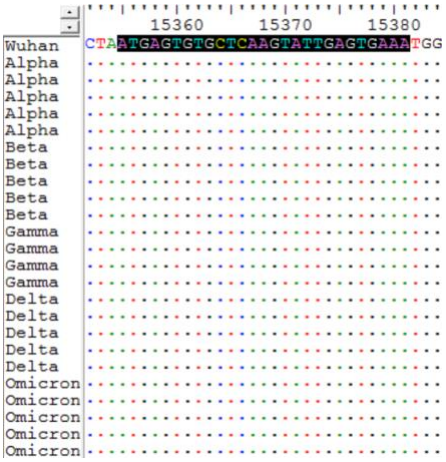


Target: Orf1a
Oligo: orf1a-crRNA4 (anti-sense)



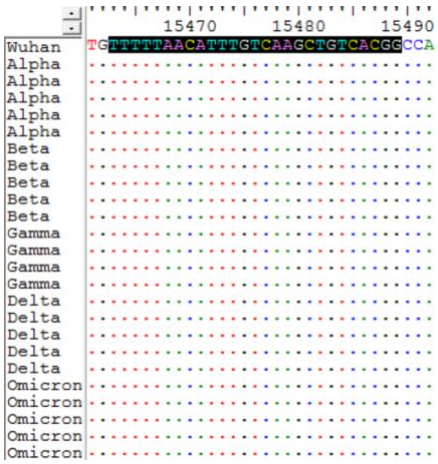
Target: Orf1b

Oligo: orf1b-crRNA1 (anti-sense)



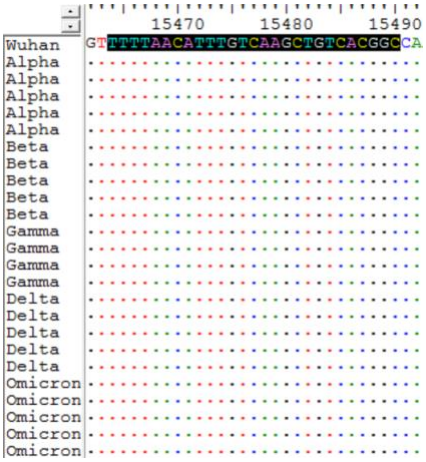
Target: Orf1b

Oligo: orf1b-crRNA2



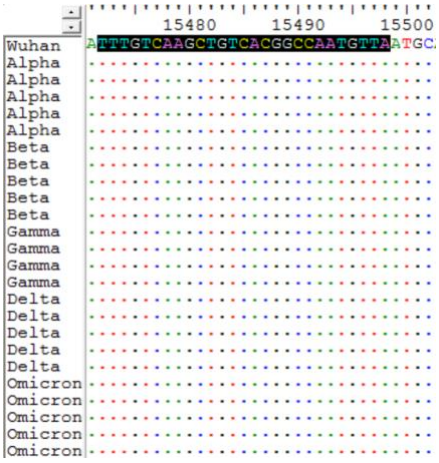
Target: Orf1b

Oligo: orf1b-crRNA3



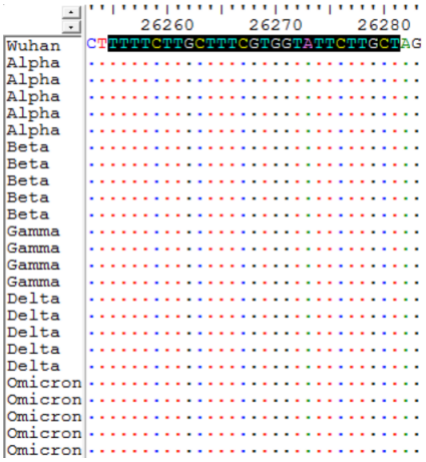
Target: Orf1b

Oligo: orf1b-crRNA4



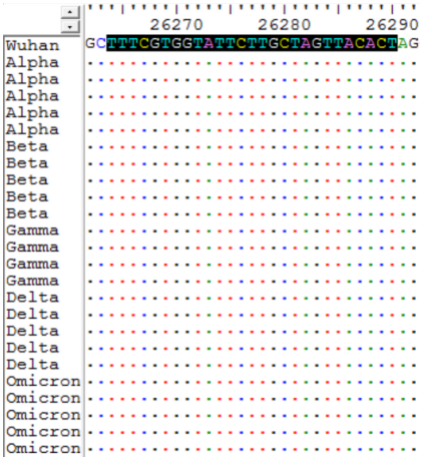
Target: E gene

Oligo: E-crRNA1



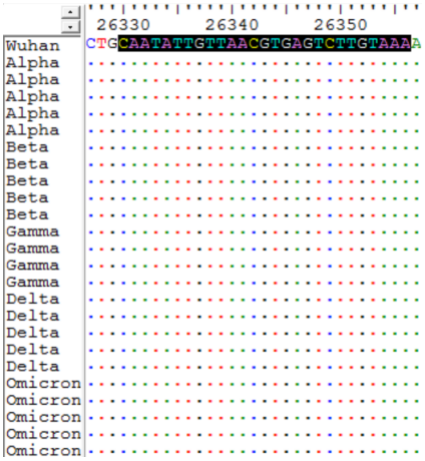
Target: E gene

Oligo: E-crRNA2



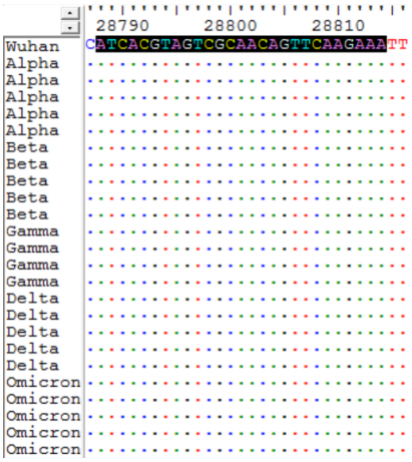
Target: E gene

Oligo: E-crRNA3 (anti-sense)



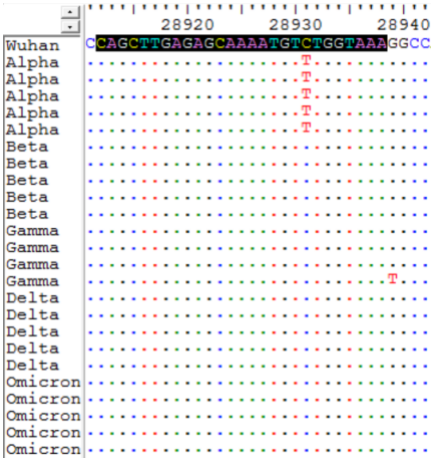
Target: N gene

Oligo: N-crRNA1 (anti-sense)



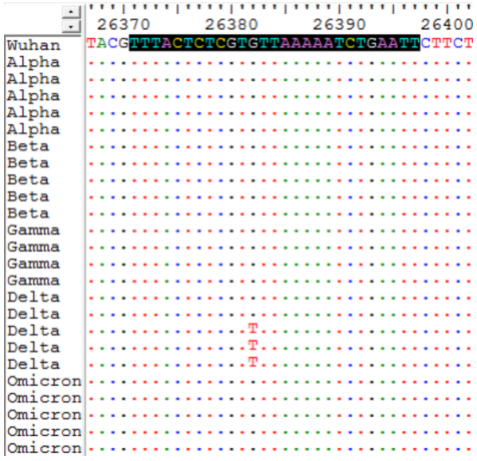
Target: N gene

Oligo: N-crRNA3 (anti-sense)



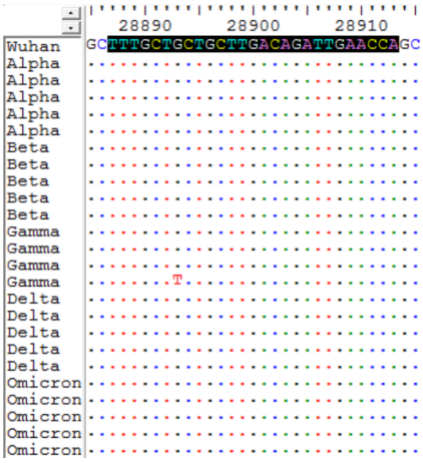
Target: E gene

Oligo: E-crRNA4



Target: N gene

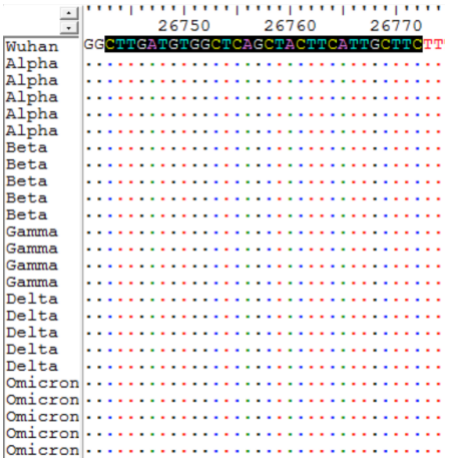
Oligo: N-crRNA2



Title: Rapid and Sensitive Detection of SARS-CoV-2 Using Clustered Regularly Interspaced Short Palindromic Repeats

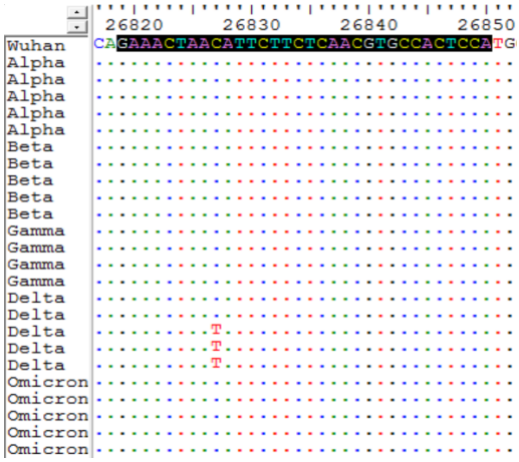
Target: M gene

Oligo: COVID19 M-RPAF



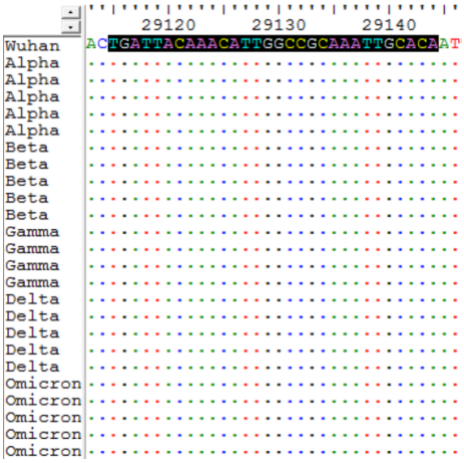
Target: M gene

Oligo: COVID19 M-RPAR



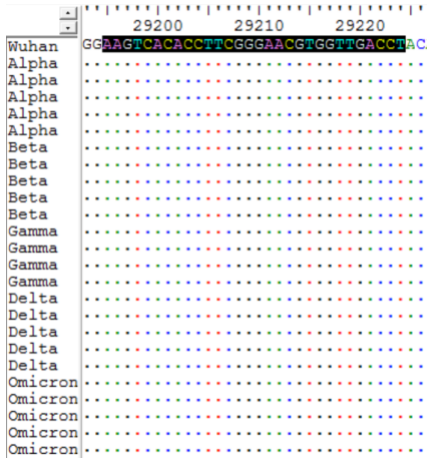
Target: N gene

Oligo: COVID19 N2-RPAF



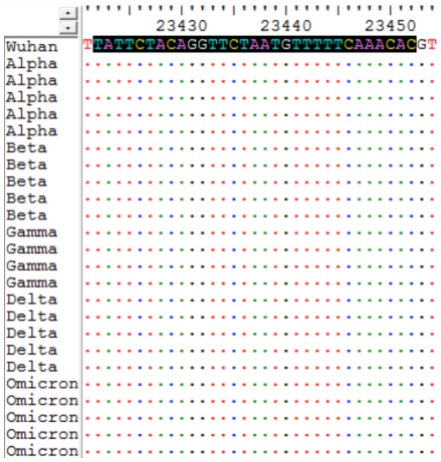
Target: N gene

Oligo: COVID19 N2-RPAR



Target: S gene

Oligo: COVID19 S2-RPAF



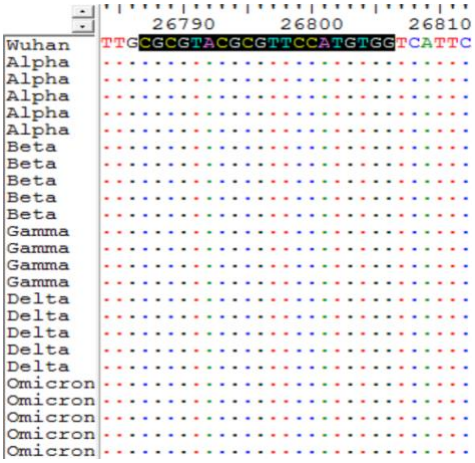
Target: S gene

Oligo: COVID19 S2-RPAR



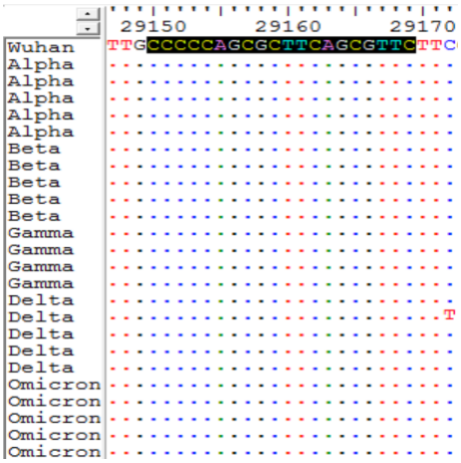
Target: M gene

Oligo: COVID19 M gRNA



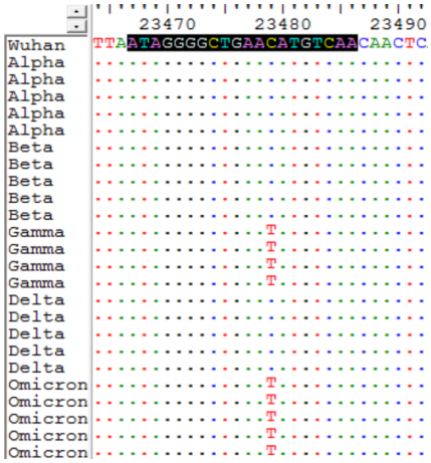
Target: N gene

Oligo: COVID19 N2 gRNA



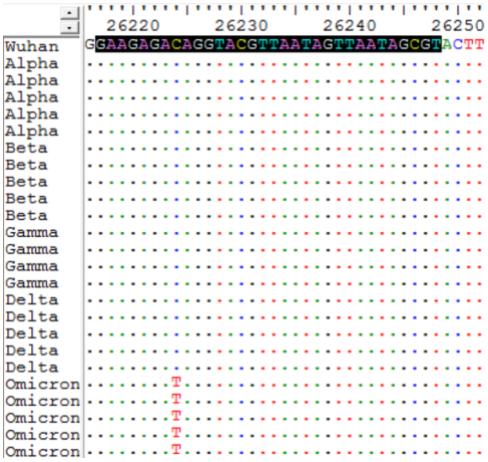
Target: S gene

Oligo: COVID19 S2 gRNA

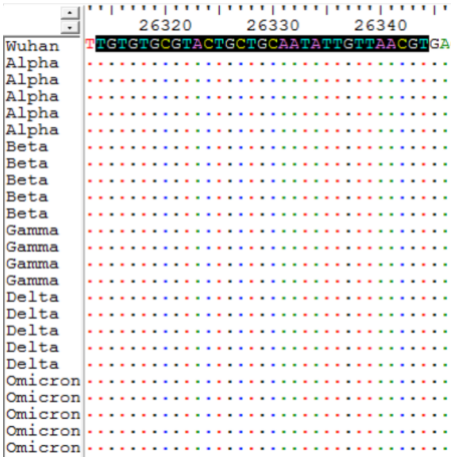


Title: Rapid Detection of 2019 Novel Coronavirus SARS-CoV-2 Using a CRISPR-based DETECTR Lateral Flow Assay

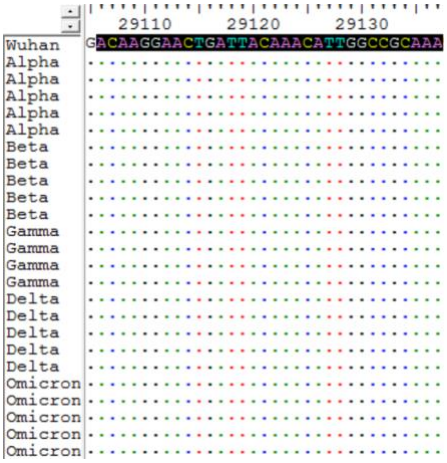
Target: E gene
Oligo: E-Sarbeco_F1_RPA



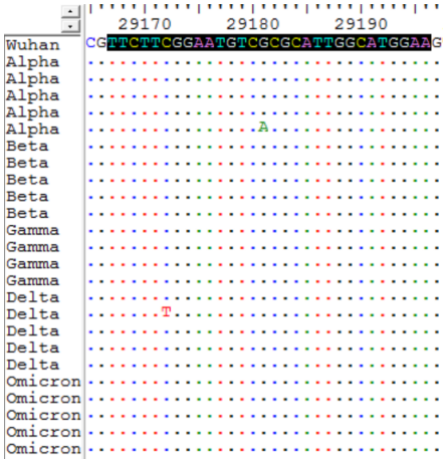
Target: E gene
Oligo: E-Sarbeco-R2_RPA



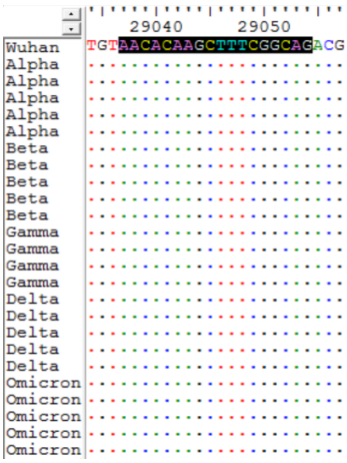
Target: N gene
Oligo: 2019-nCoV_N2-F_RPA



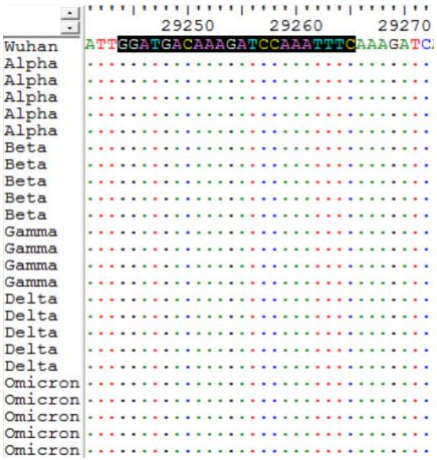
Target: N gene
Oligo: 2019-nCoV_N2-R_RPA



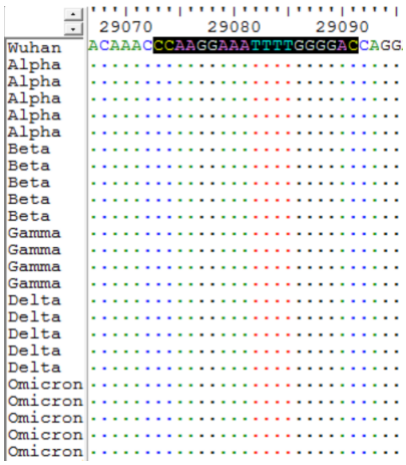
Target: N gene
Oligo: N-gene F3



Target: N gene
Oligo: N-gene B3



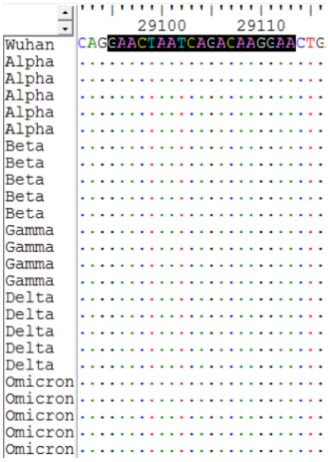
Target: N gene
Oligo: N-gene FIP



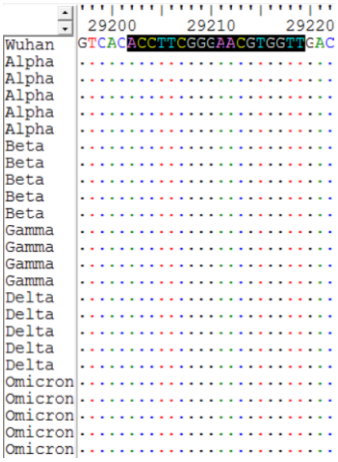
Target: N gene
Oligo: N-gene BIP



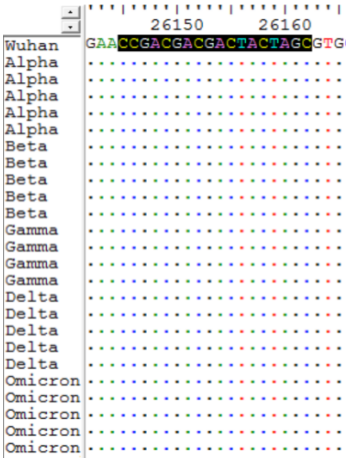
Target: N gene
Oligo: N-gene-LF (anti-sense)



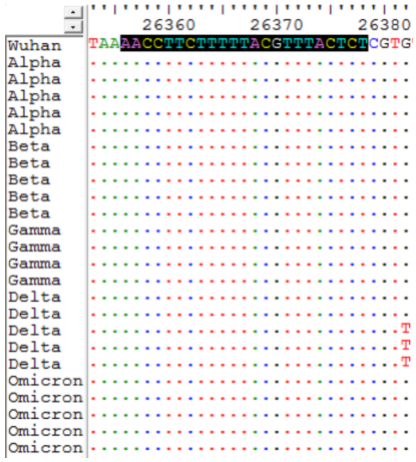
Target: N gene
Oligo: N-gene-LB



Target: E gene
Oligo: E-gene F3



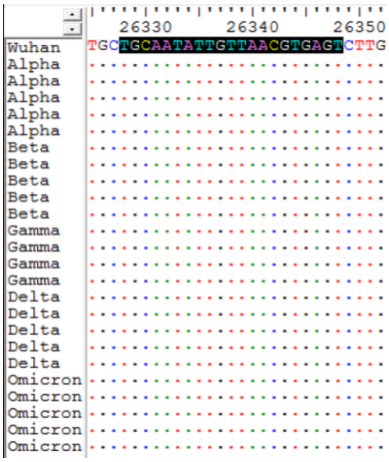
Target: E gene
Oligo: E-gene B3 (anti-sense)



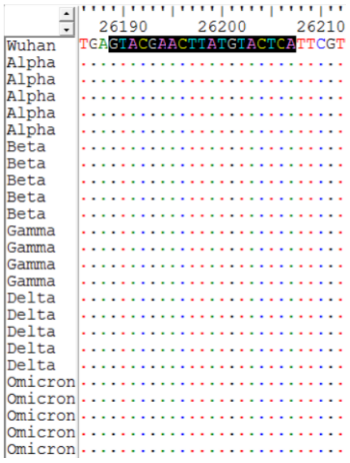
Target: E gene
Oligo: E-gene FIP



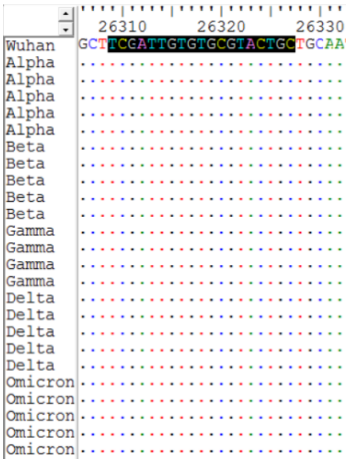
Target: E gene
Oligo: E-gene BIP (anti-sense)



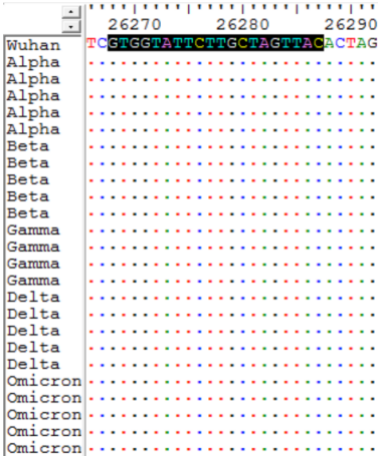
Target: E gene
Oligo: E-gene FL (anti-sense)



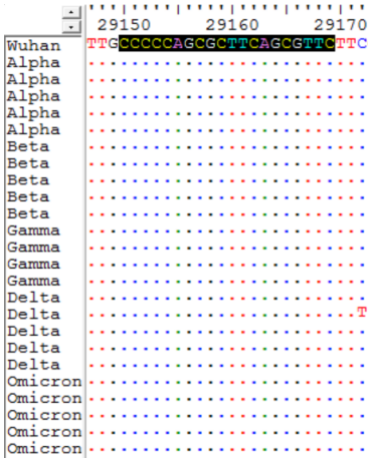
Target: E gene
Oligo: E-gene BL



Target: E gene
Oligo: E-gene gRNA



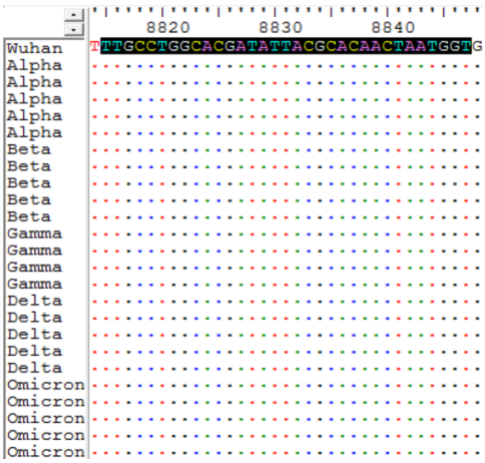
Target: N gene
Oligo: N-gene gRNA



Title: Rapid detection of SARS-CoV-2 with CRISPR-Cas12a

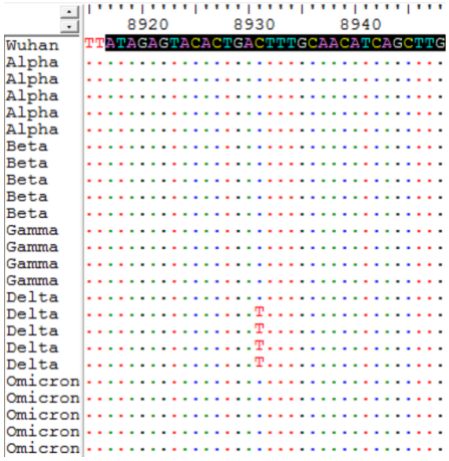
Target: Orf1ab

Oligo: ORF1ab-F5



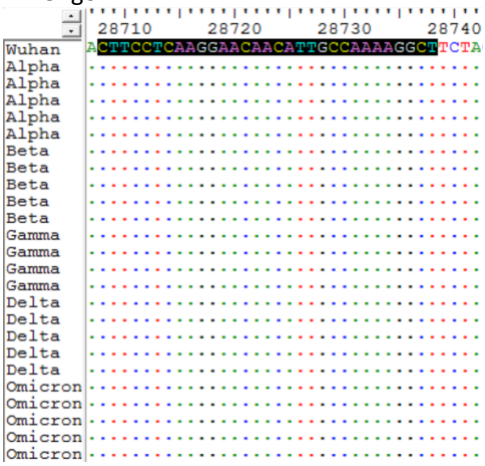
Target: Orf1ab

Oligo: ORF1ab-R1 (anti-sense)



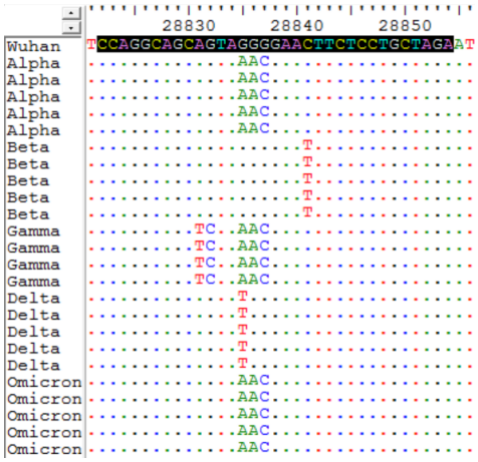
Target: N gene

Oligo: N-F4



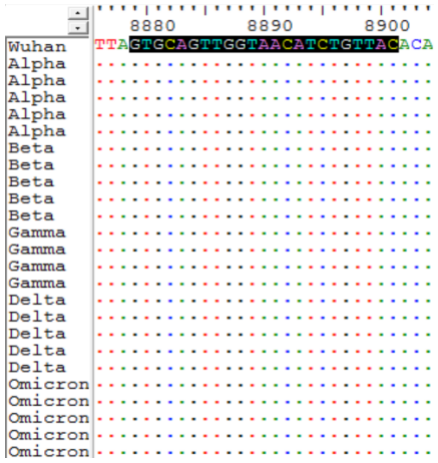
Target: N gene

Oligo: N-R2 (anti-sense)



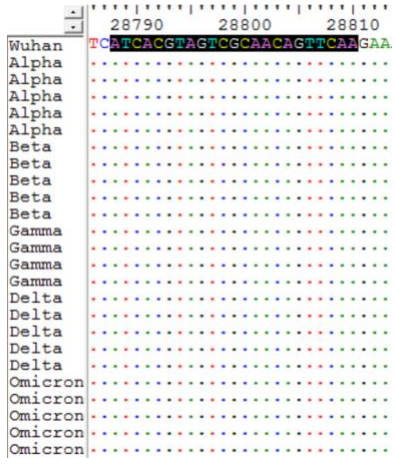
Target: Orf1ab

Oligo: crRNA-ORF1ab



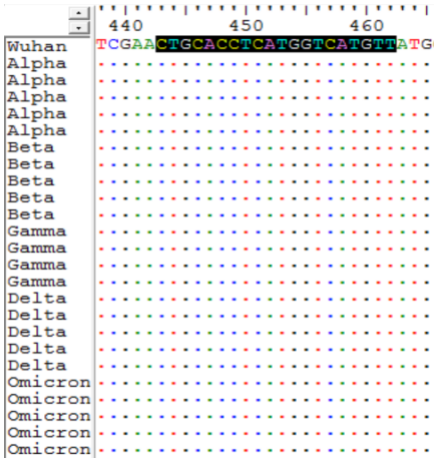
Target: N gene

Oligo: crRNA-nCOV-N (anti-sense)

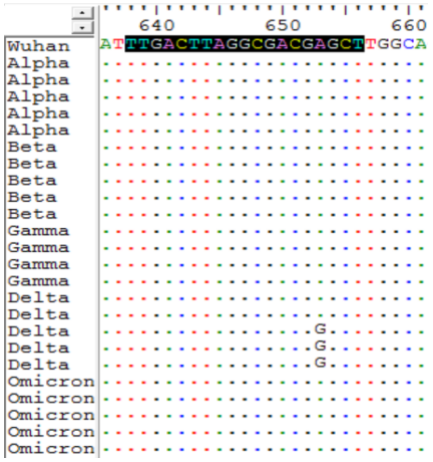


Title: Rapid SARS-CoV-2 testing in primary material based on a novel multiplex RT-LAMP assay

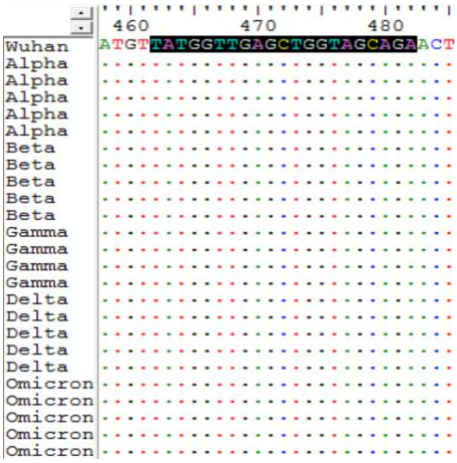
Target: Orf1a
Oligo: ORF1a-A-F3



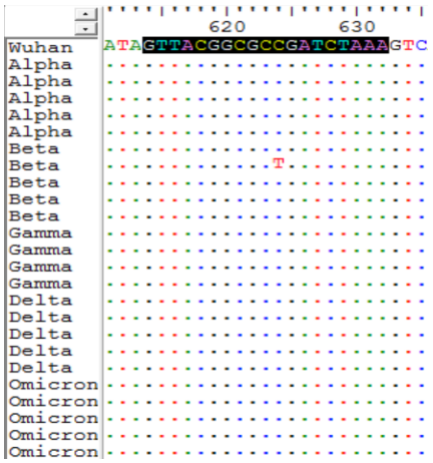
Target: Orf1a
Oligo: ORF1a-A-B3 (anti-sense)



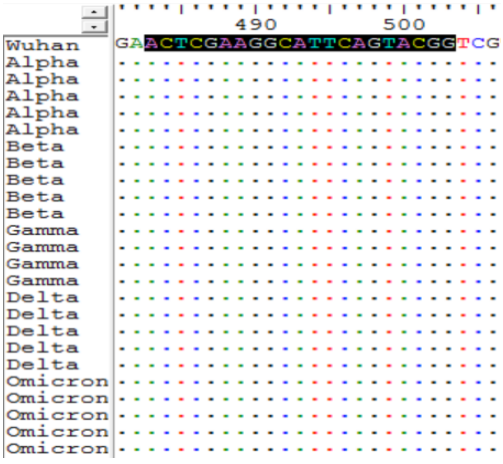
Target: Orf1a
Oligo: ORF1a-A-FIP



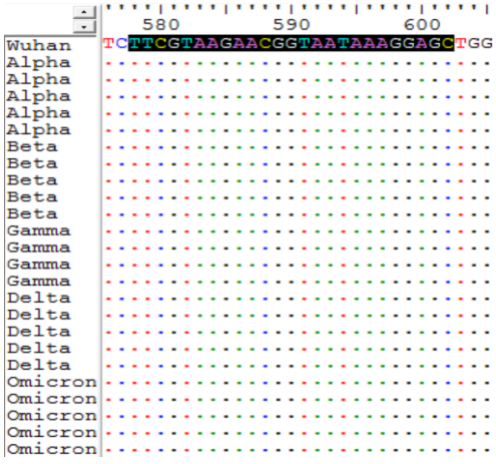
Target: Orf1a
Oligo: ORF1a-A-BIP (anti-sense)



Target: Orf1a
Oligo: ORF1a-A-LF (anti-sense)

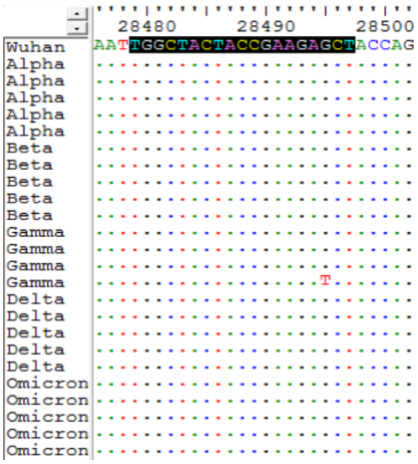


Target: Orf1a
Oligo: ORF1a-A-LB



Target: N gene

Oligo: GeneN-A-F3



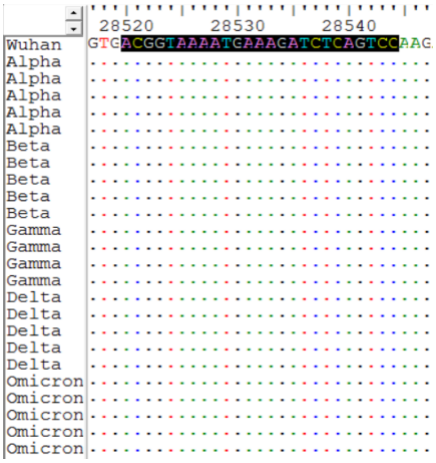
Target: N gene

Oligo: Gene N-A-FIP



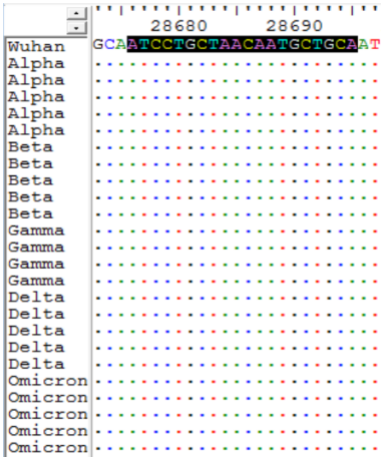
Target: N gene

Oligo: Gene N-A-LF (anti-sense)



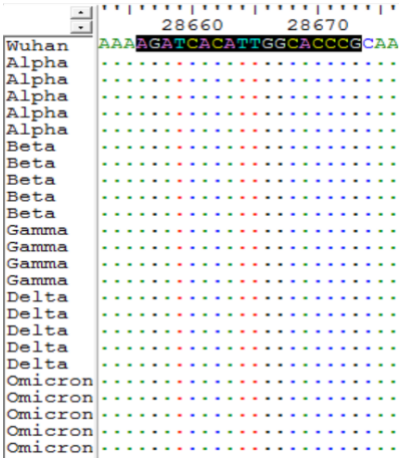
Target: N gene

Oligo: Gene N-A-B3 (anti-sense)



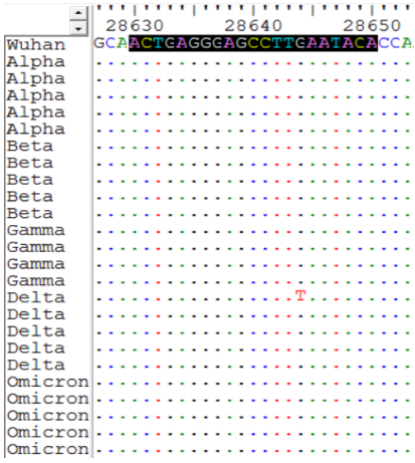
Target: N gene

Oligo: Gene N-A-BIP (anti-sense)



Target: N gene

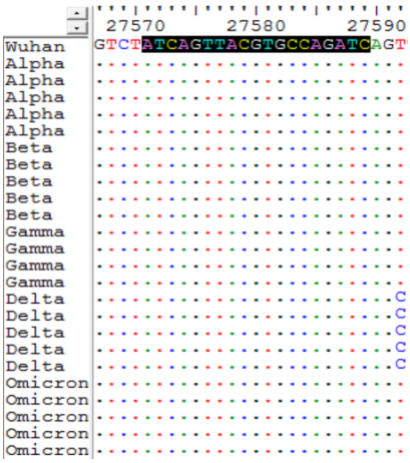
Oligo: Gene N-A-LB



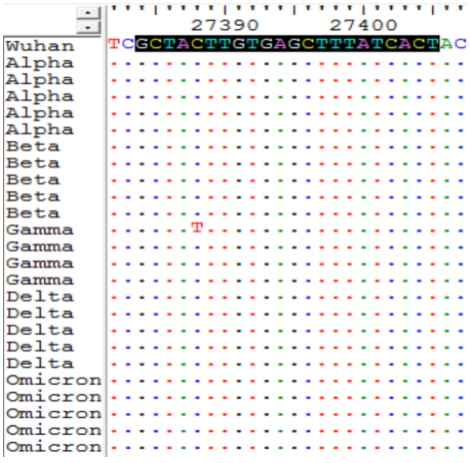
Target: ORF7a
Oligo: ORF7a-F3



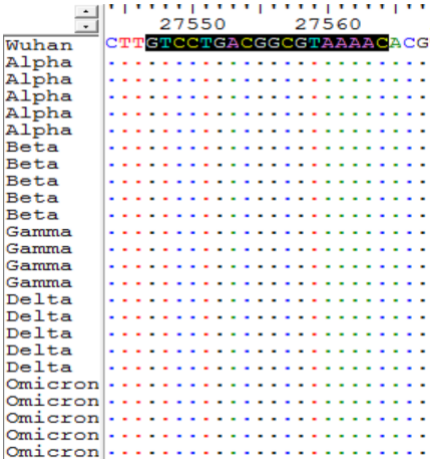
Target: ORF7a
Oligo: ORF7a-B3 (anti-sense)



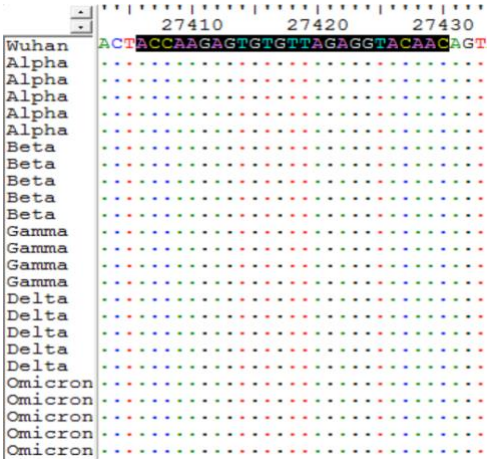
Target: ORF7a
Oligo: ORF7a-FIP



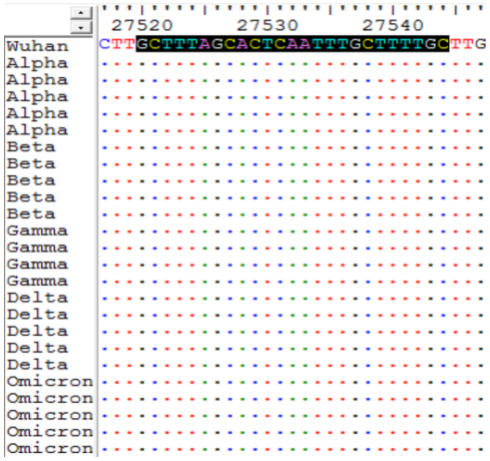
Target: ORF7a
Oligo: ORF7a-BIP (anti-sense)



Target: ORF7a
Oligo: ORF7a-LF (anti-sense)

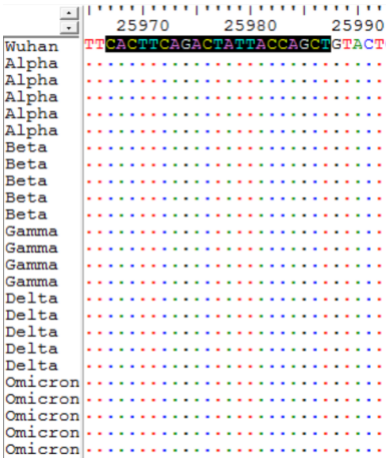


Target: ORF7a
Oligo: ORF7a-LB



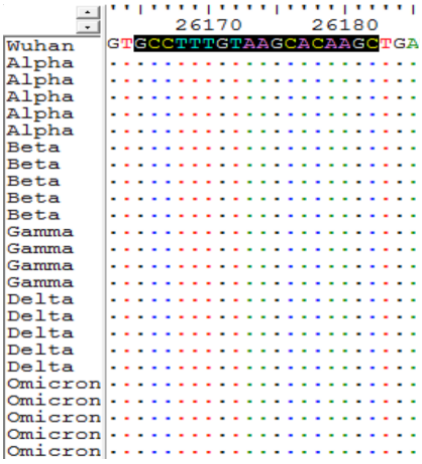
Target: ORF3a

Oligo: ORF3a-A-F3



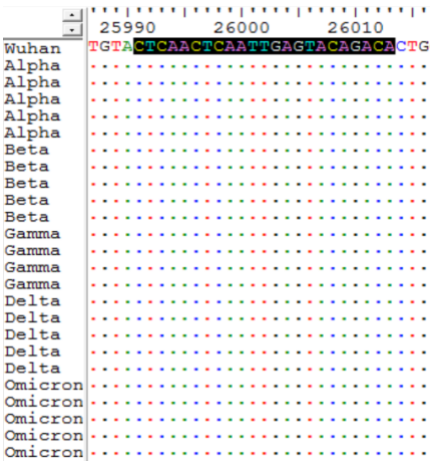
Target: ORF3a

Oligo: ORF3a-A-B3 (anti-sense)



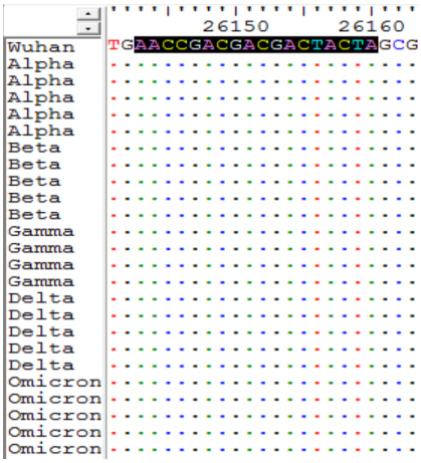
Target: ORF3a

Oligo: ORF3a-A-FIP



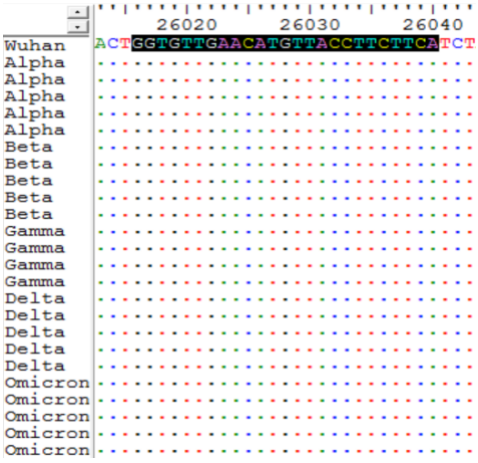
Target: ORF3a

Oligo: ORF3a-A-BIP (anti-sense)



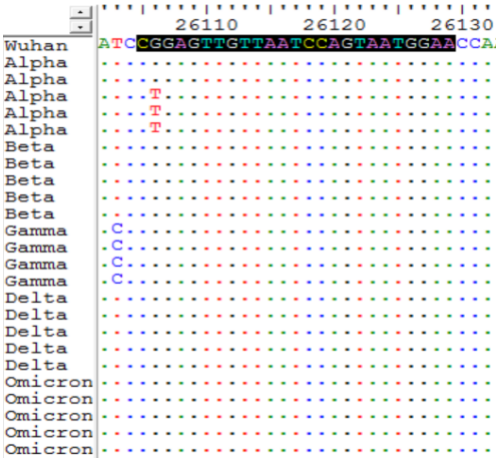
Target: ORF3a

Oligo: ORF3a-A-LF (anti-sense)



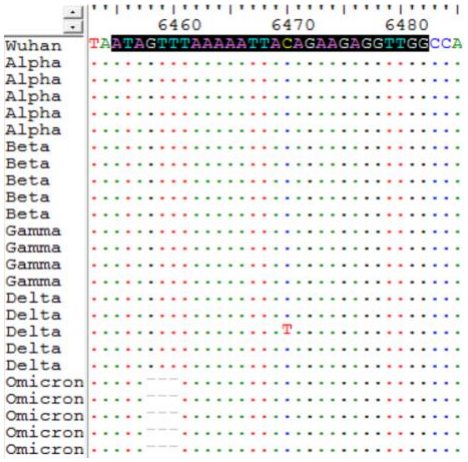
Target: ORF3a

Oligo: ORF3a-A-LB



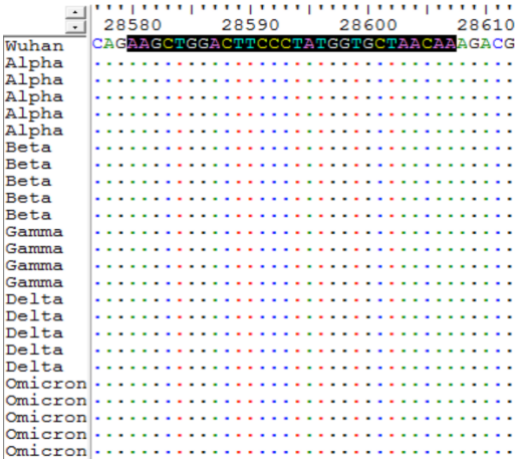
Target: Orf1a

Oligo: LwaCas13a crRNA ORF1ab2 (anti-sense)



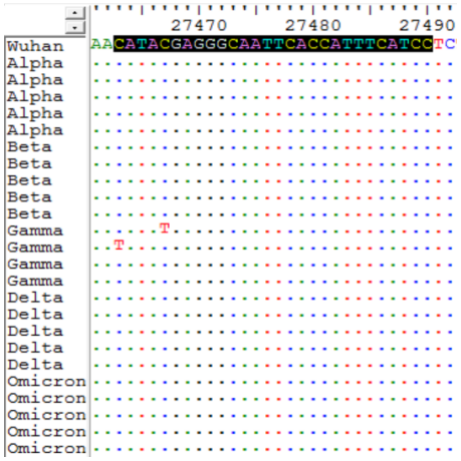
Target: N gene

Oligo: LwaCas13a crRNA Gene-N



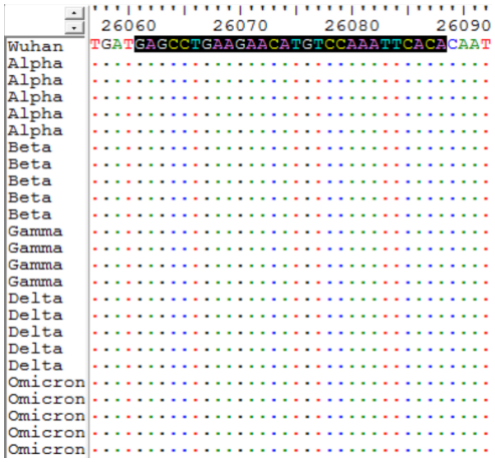
Target: ORF7a

Oligo: LwaCas13a crRNA Orf7 (anti-sense)



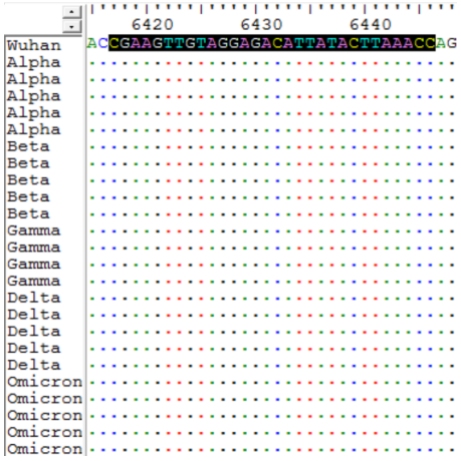
Target: ORF3a

Oligo: LwaCas13a crRNA Orf3 (anti-sense)



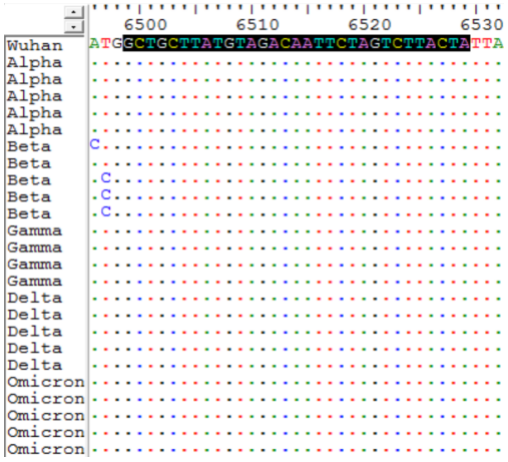
Target: Orf1ab

Oligo: Orf1ab-Fw_v12



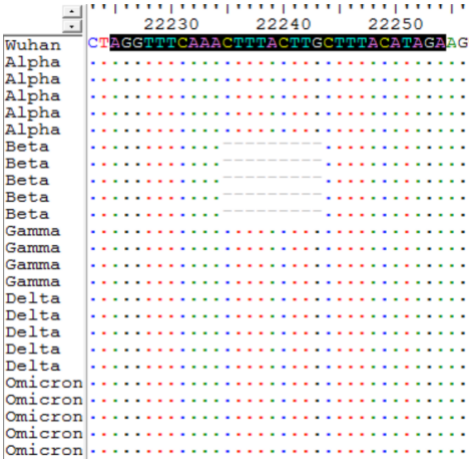
Target: Orf1ab

Oligo: Orf1ab-Rev_v12 (anti-sense)



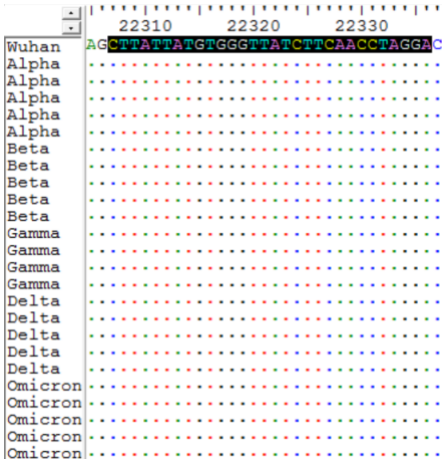
Target: S gene

Oligo: S-RPA-Fw_v12



Target: S gene

Oligo: S-RPA-Rev_v12 (anti-sense)



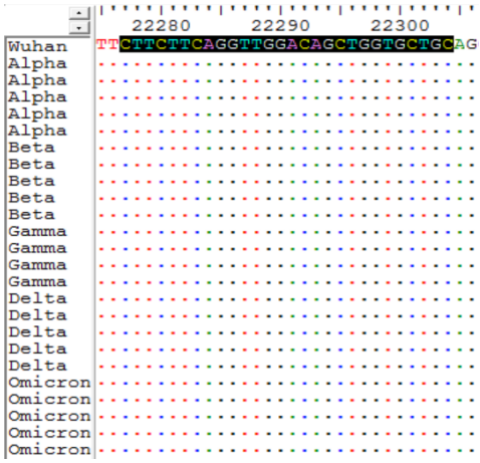
Target: Orf1ab

Oligo: LwaCas13a crRNA ORF1ab2 (anti-sense)



Target: S gene

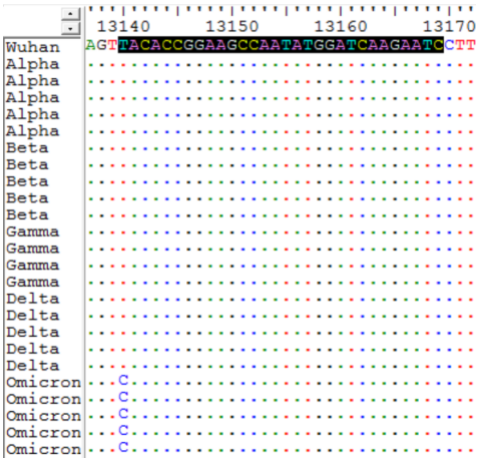
Oligo: LwaCas13a crRNA S Gene2 (anti-sense)



Title: Reverse Transcription Recombinase Polymerase Amplification Coupled with CRISPR-Cas12a for Facile and Highly Sensitive Colorimetric SARS-CoV-2 Detection

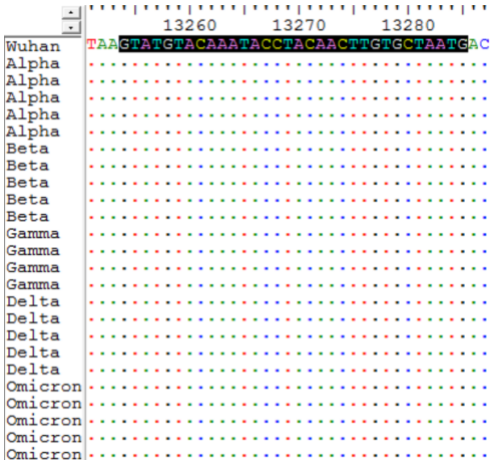
Target: Orf1ab

Oligo: Forward primer (OFR1ab)



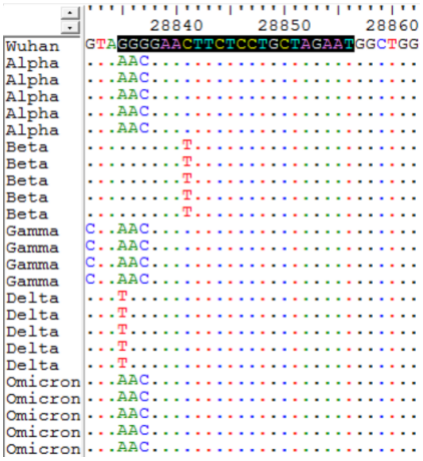
Target: Orf1ab

Oligo: Reverse primer (OFR1ab) (anti-sense)



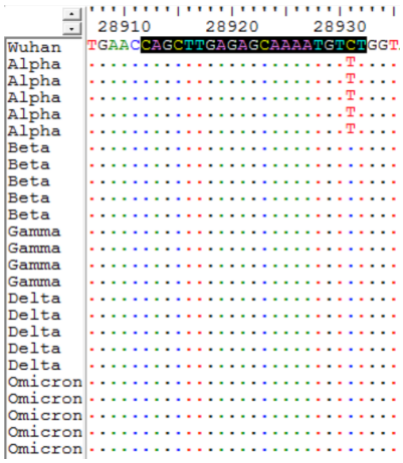
Target: N gene

Oligo: Forward primer (N region)



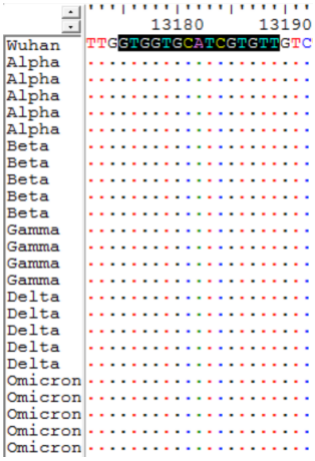
Target: N gene

Oligo: Reverse primer (N region) (anti-sense)



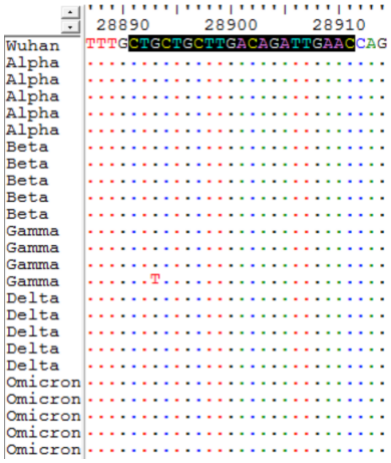
Target: Orf1ab

Oligo: crRNA (OFR1ab)



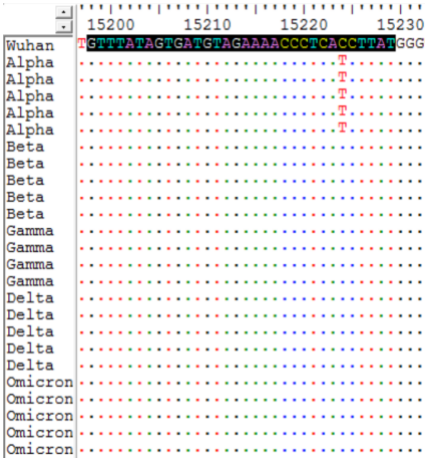
Target: N gene

Oligo: crRNA (N region)

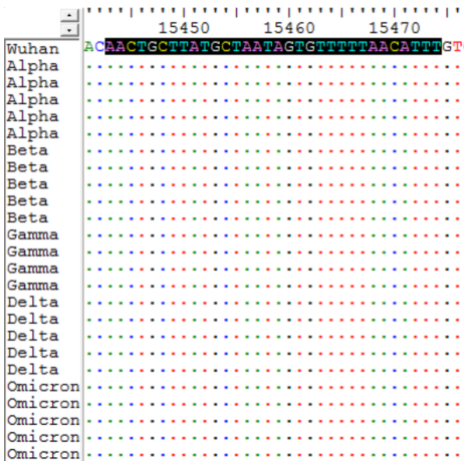


Title: SARS-CoV-2 detection with CRISPR diagnostics

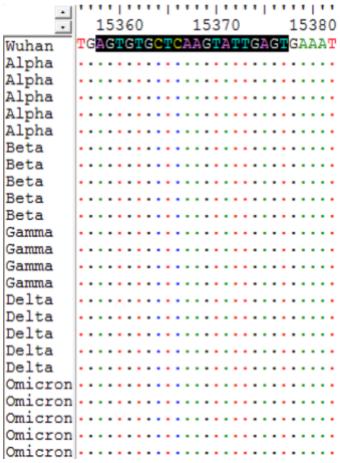
Target: RdRp gene
Oligo: RPA-RdRp-F0



Target: RdRp gene
Oligo: RPA-RdRp-R2 (anti-sense)



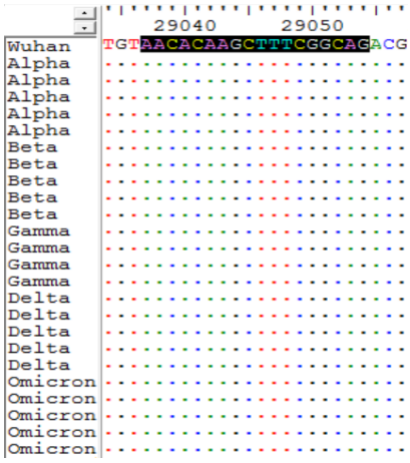
Target: RdRp gene
Oligo: AasgRNA-RdRp-3 (anti-sense)



Title: SARS-CoV-2 Direct Detection Without RNA Isolation With Loop-Mediated Isothermal Amplification (LAMP) and CRISPR-Cas12

Target: N gene

Oligo: N-geneF3



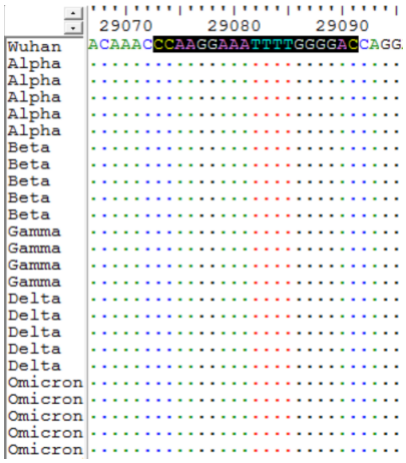
Target: N gene

Oligo: N-geneB3 (anti-sense)



Target: N gene

Oligo: N-gene FIP



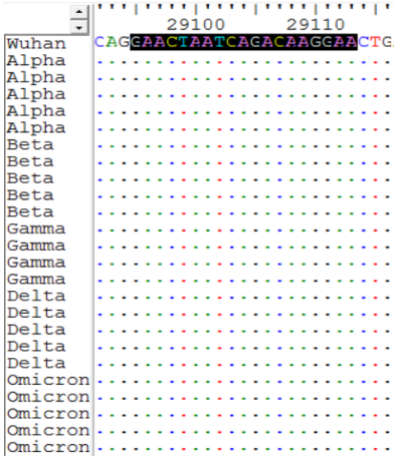
Target: N gene

Oligo: N-gene BIP (anti-sense)



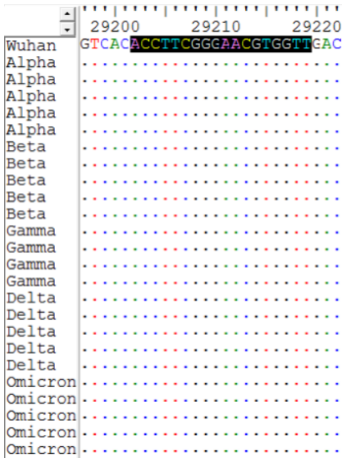
Target: N gene

Oligo: N gene FL (anti-sense)



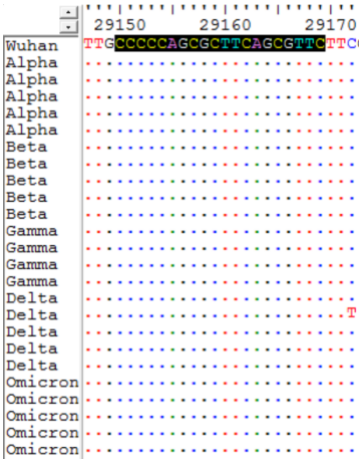
Target: N gene

Oligo: N gene BL



Target: N gene

Oligo: N gene gRNA



Title: SARS-CoV-2 RNA Detection by a Cellphone-Based Amplification-Free System with CRISPR/CAS-Dependent Enzymatic (CASCADE) Assay

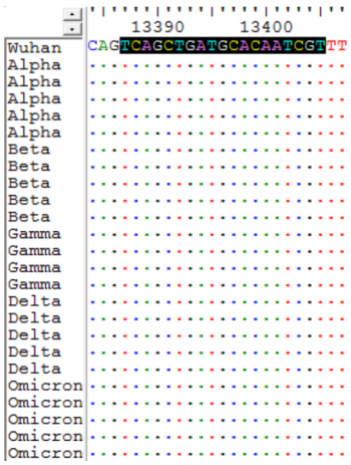
Target: Orf1ab

Oligo: Orf1ab forward primer



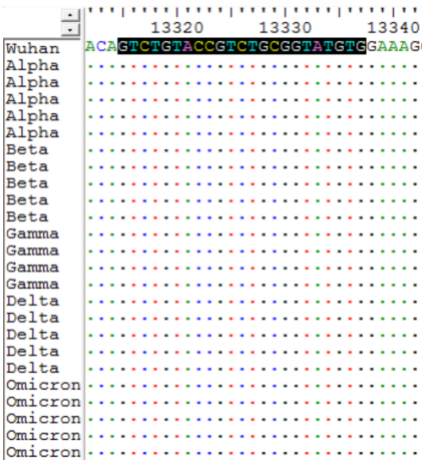
Target: Orf1ab

Oligo: Orf1ab reverse primer (anti-sense)



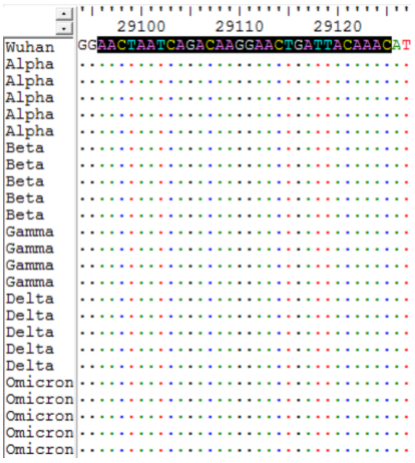
Target: Orf1ab

Oligo: Orf1ab crRNA (anti-sense)

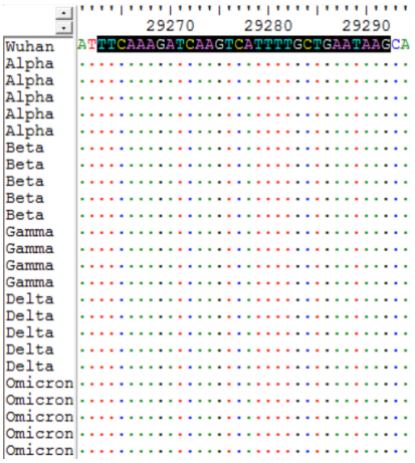


Title: Sensitive and Easy-Read CRISPR Strip for COVID-19 Rapid Point-of-Care Testing

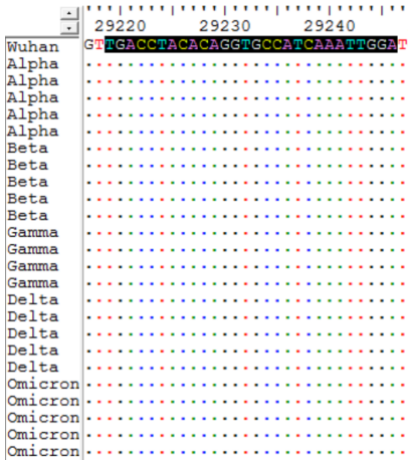
Target: N gene
Oligo: nCoVnp-F1



Target: N gene
Oligo: nCoVnp-R1



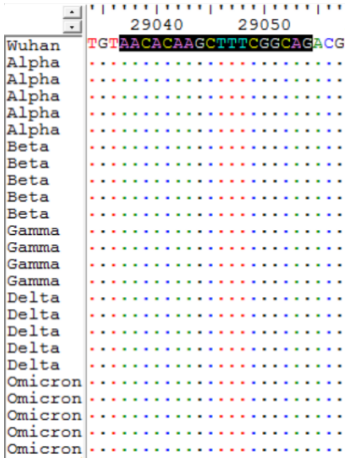
Target: N gene
Oligo: crRNA



Title: Sensitive and rapid on-site detection of SARS-CoV-2 using a gold nanoparticle-based high-throughput platform coupled with CRISPR/Cas12-assisted RT-LAMP

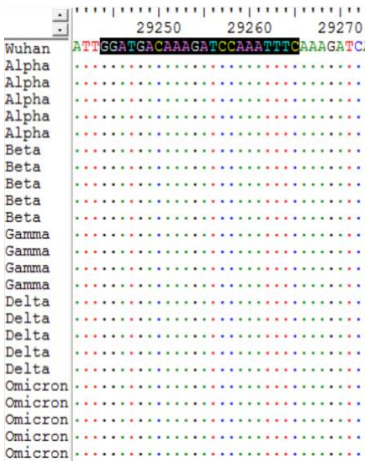
Target: N gene

Oligo: N-gene-F3



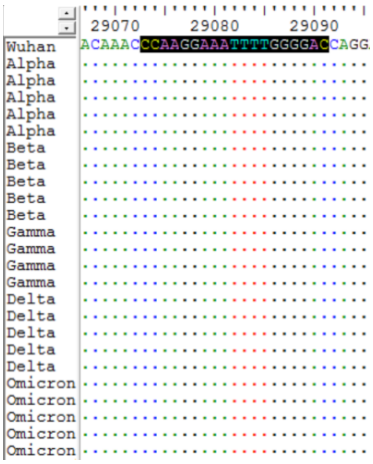
Target: N gene

Oligo: N-gene-B3 (anti-sense)



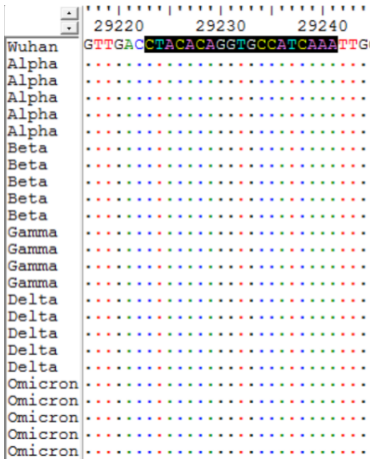
Target: N gene

Oligo: N-gene-FIP



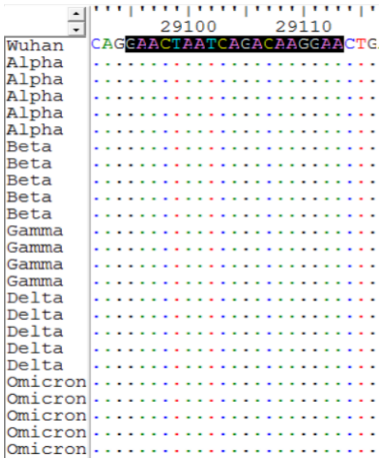
Target: N gene

Oligo: N-gene-BIP (anti-sense)



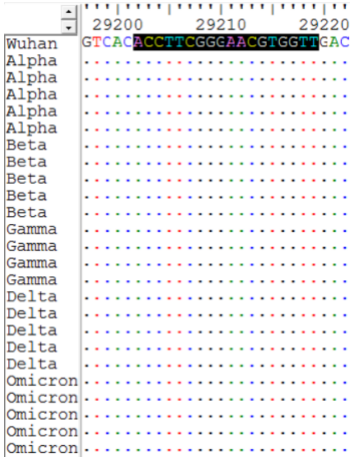
Target: N gene

Oligo: N gene-FL (anti-sense)



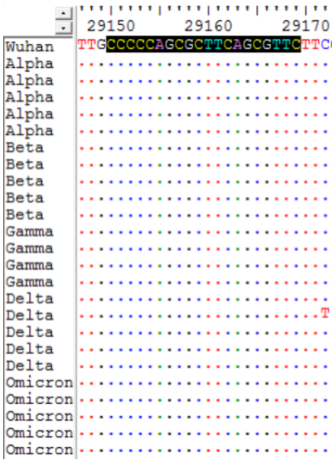
Target: N gene

Oligo: N gene-BL



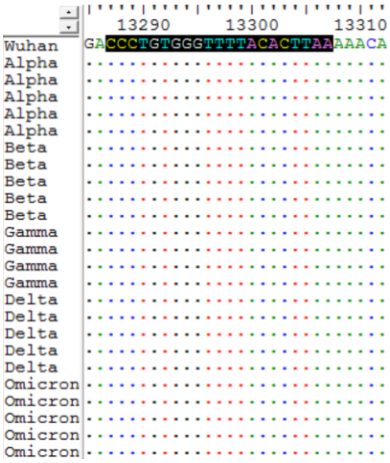
Target: N gene

Oligo: gRNA

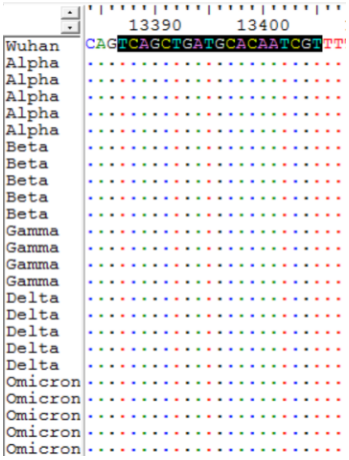


Title: Sensitive tracking of circulating viral RNA through all stages of SARS-CoV-2 infection

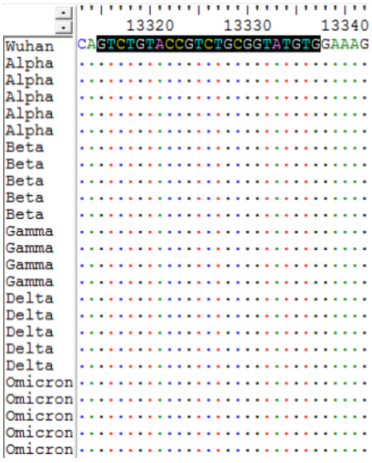
Target: Orf1ab
Oligo: ORF1ab-F



Target: Orf1ab
Oligo: ORF1ab-R (anti-sense)



Target: Orf1ab
Oligo: gRNA -ORF1ab (anti-sense)

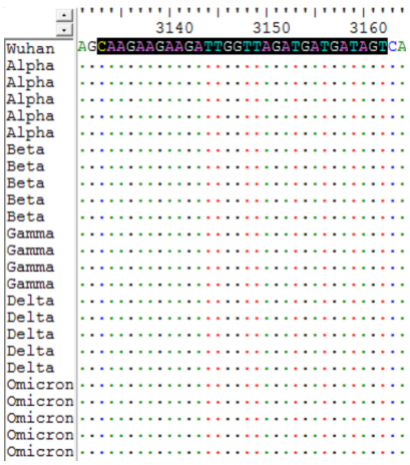


Title: Streamlined inactivation, amplification, and Cas13-based detection of SARS-CoV-2

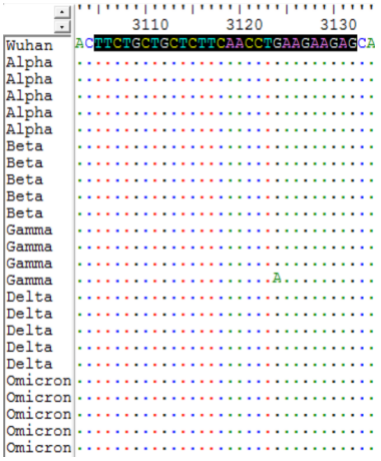
Target: Orf1ab
Oligo: RPA Primer (forward)



Target: Orf1ab
Oligo: RPA Primer (reverse)



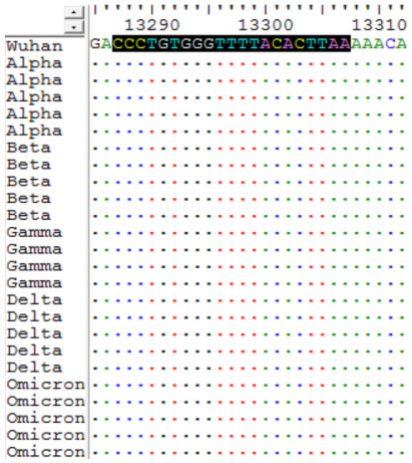
Target: Orf1ab
Oligo: Cas13a crRNA (anti-sense)



Title: Ultra-sensitive and high-throughput CRISPR-powered COVID-19 diagnosis

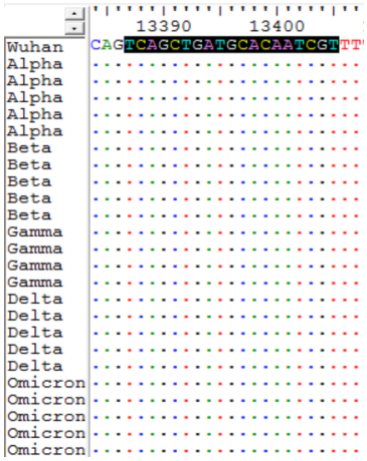
Target: Orf1ab

Oligo: ORF1ab-F



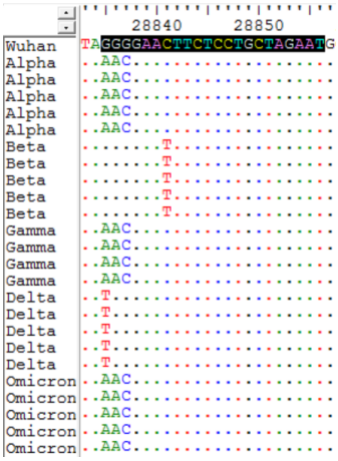
Target: Orf1ab

Oligo: ORF1ab-R (anti-sense)



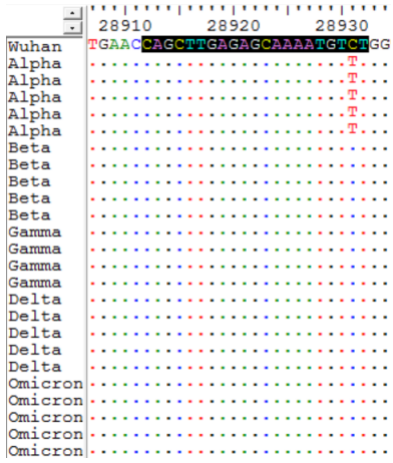
Target: N gene

Oligo: N-F



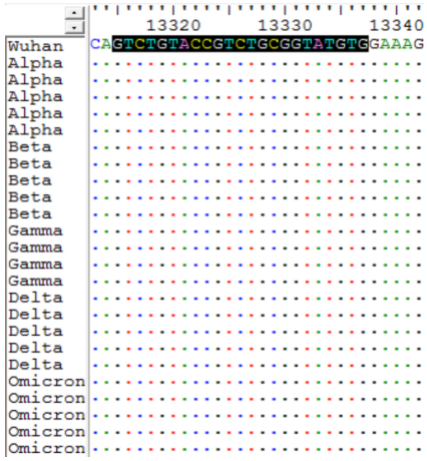
Target: N gene

Oligo: N-R (reverse)



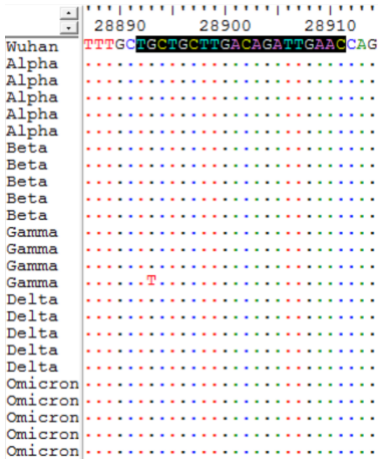
Target: Orf1ab

Oligo: gRNA -ORF1ab (anti-sense)



Target: N gene

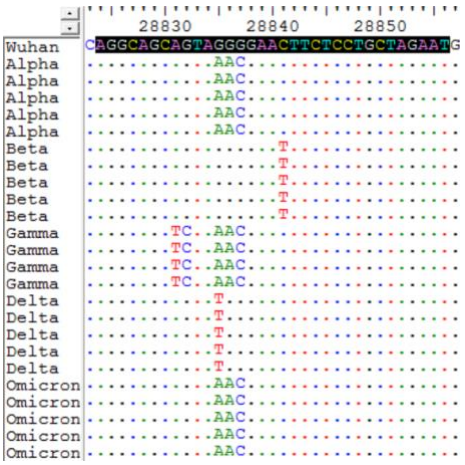
Oligo: gRNA - N



Title: Ultrasensitive and visual detection of SARS-CoV-2 using all-in-one dual CRISPR-Cas12a assay

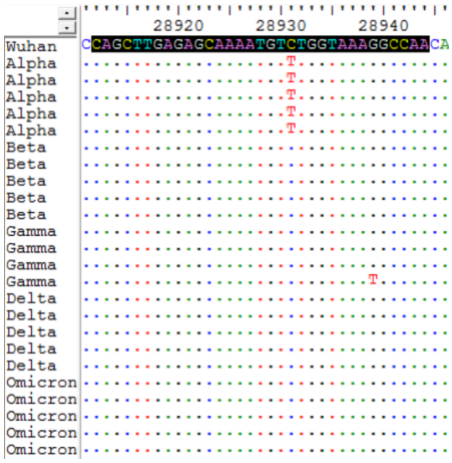
Target: N gene

Oligo: Forward primer



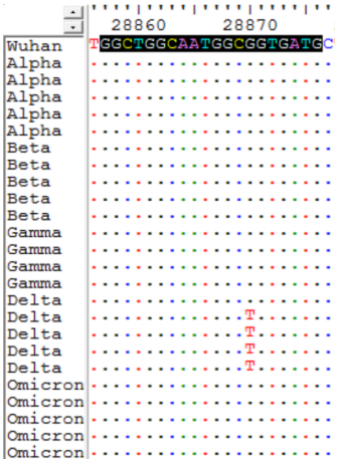
Target: N gene

Oligo: Reverse primer (anti-sense)



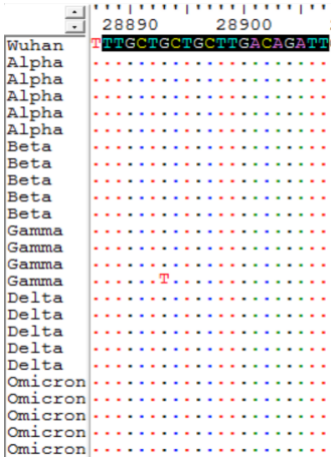
Target: N gene

Oligo: crRNA1 (anti-sense)



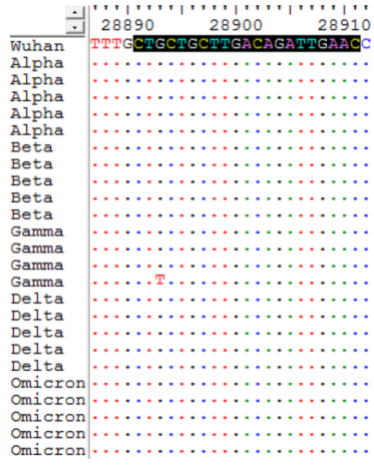
Target: N gene

Oligo: crRNA2



Target: N gene

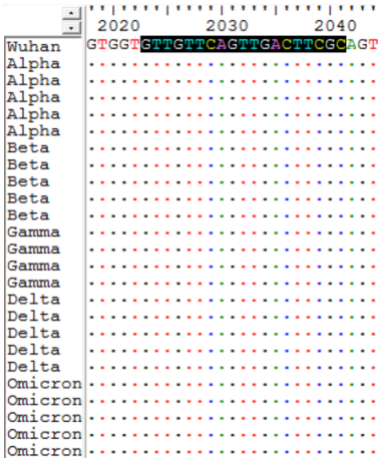
Oligo: crRNA3



Title: UnCovid: A versatile, low-cost, and open-source protocol for SARS-CoV-2 RNA detection

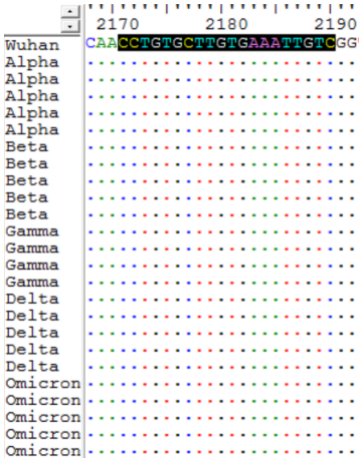
Target: Orf1ab

Oligo: FCb3



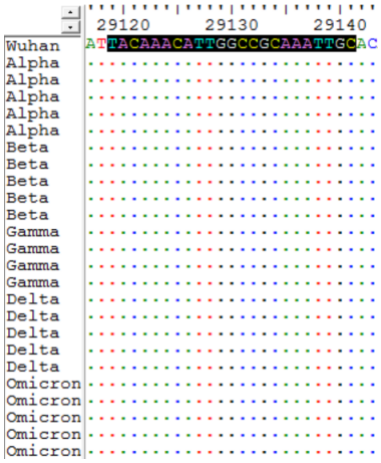
Target: Orf1ab

Oligo: RCb2 (anti-sense)



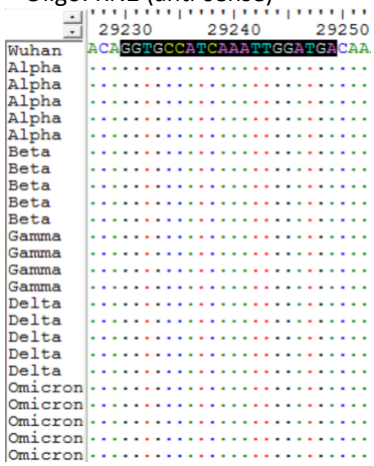
Target: N gene

Oligo: FN1



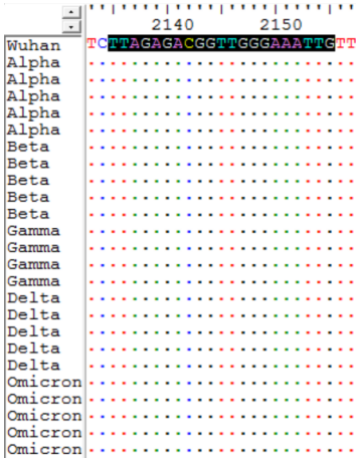
Target: N gene

Oligo: RN2 (anti-sense)



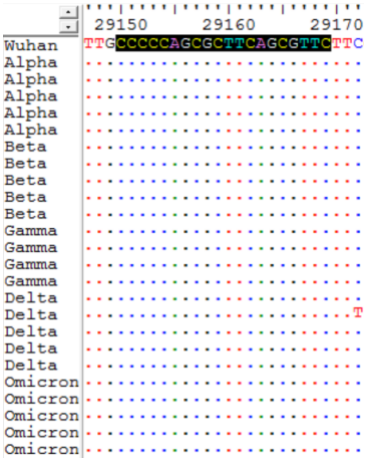
Target: Orf1ab

Oligo: ORF1ab crRNA



Target: N gene

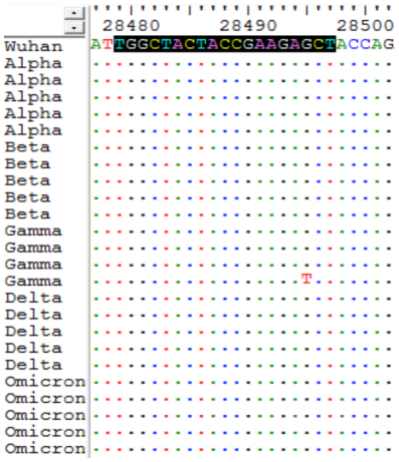
Oligo: N crRNA



Title: Universally Stable and Precise CRISPR-LAMP Detection Platform for Precise Multiple Respiratory Tract Virus Diagnosis Including Mutant SARS-CoV-2 Spike N501Y

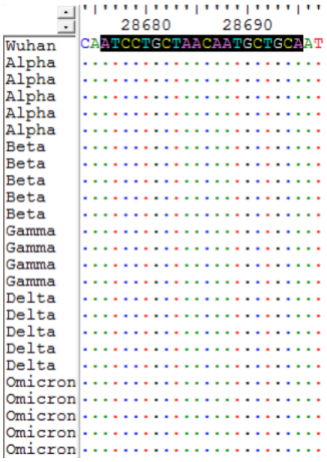
Target: N gene

Oligo: F3



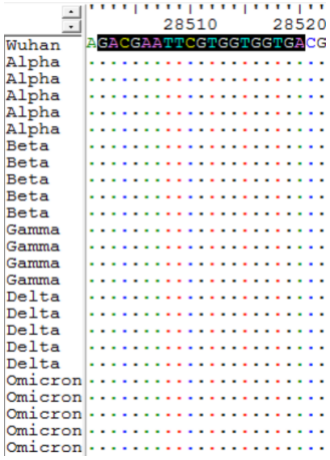
Target: N gene

Oligo: B3 (anti-sense)



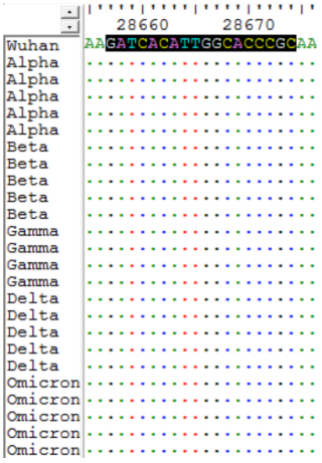
Target: N gene

Oligo: FIP



Target: N gene

Oligo: BIP (anti-sense)



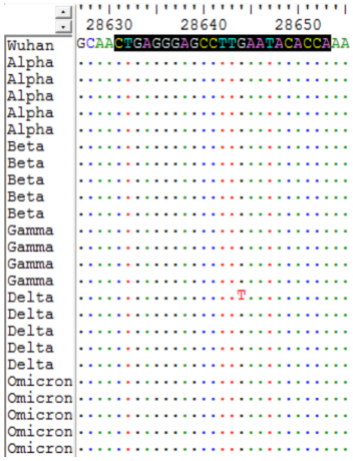
Target: N gene

Oligo: LF (anti-sense)

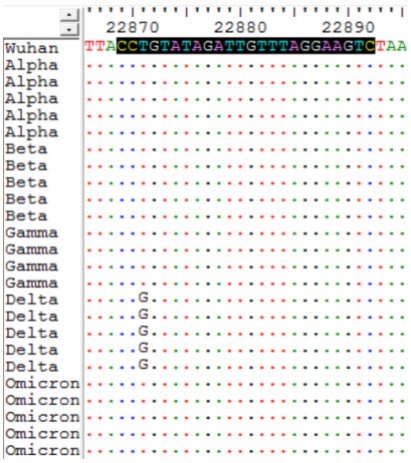


Target: N gene

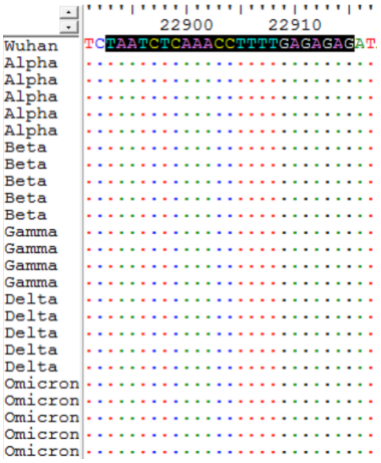
Oligo: LB



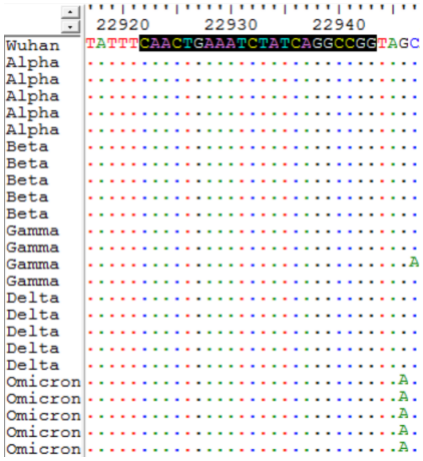
Target: S gene
Oligo: F3



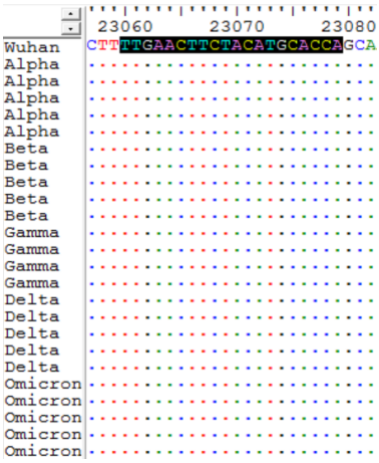
Target: S gene
Oligo: FIP



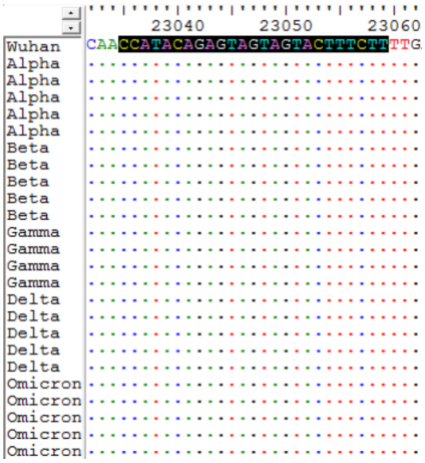
Target: S gene
Oligo: LF (anti-sense)



Target: S gene
Oligo: B3 (anti-sense)

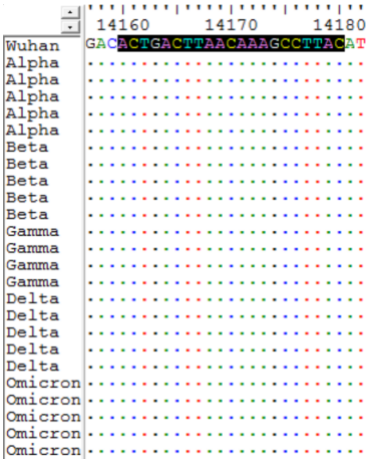


Target: S gene
Oligo: BIP (anti-sense)



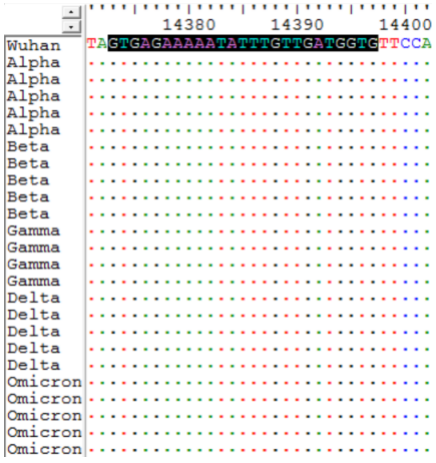
Target: RdRp gene

Oligo: F3



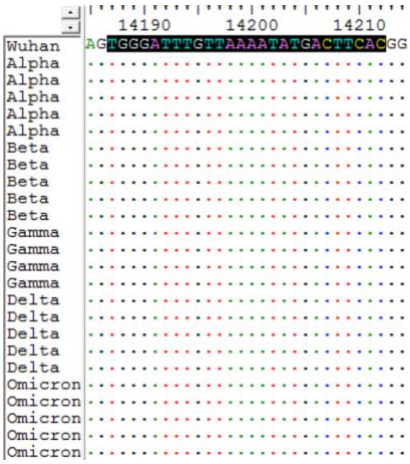
Target: RdRp gene

Oligo: B3 (anti-sense)



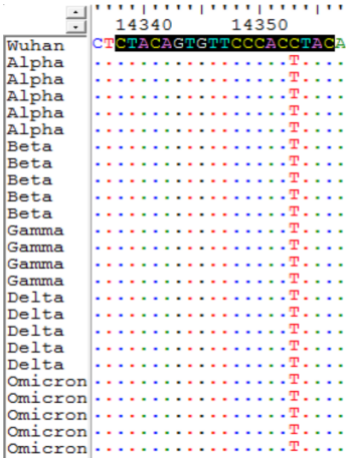
Target: RdRp gene

Oligo: FIP



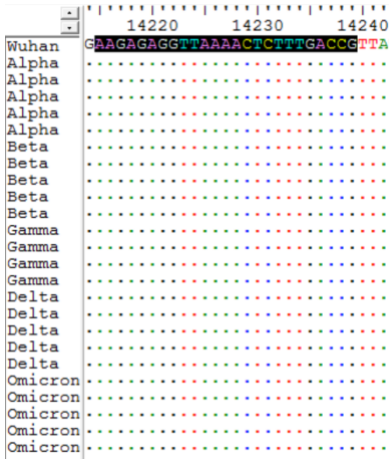
Target: RdRp gene

Oligo: BIP (anti-sense)



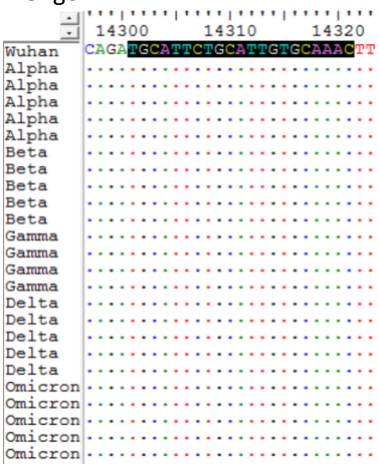
Target: RdRp gene

Oligo: LF (anti-sense)



Target: RdRp gene

Oligo: LB



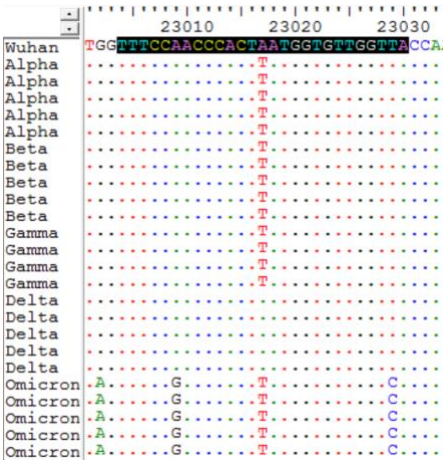
Target: N gene

Oligo: N-crRNA1



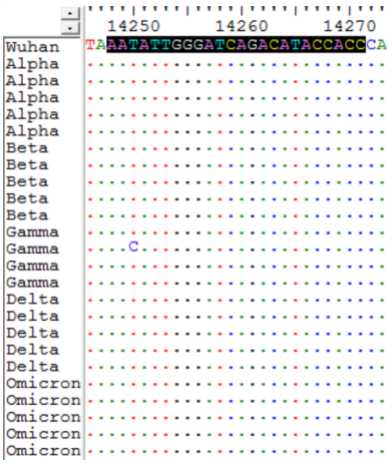
Target: S gene

Oligo: crRNA for S gene



Target: RdRp gene

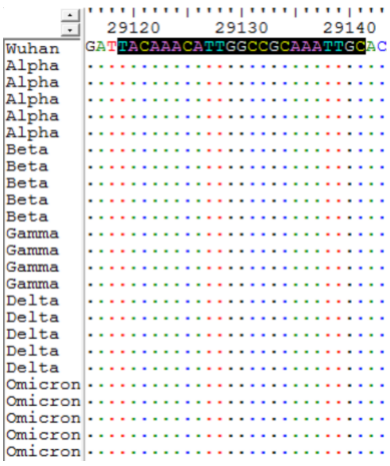
OligoRdRp-crRNA4 (anti-sense)



Title: Unlocking SARS-CoV-2 detection in low- and middle-income countries

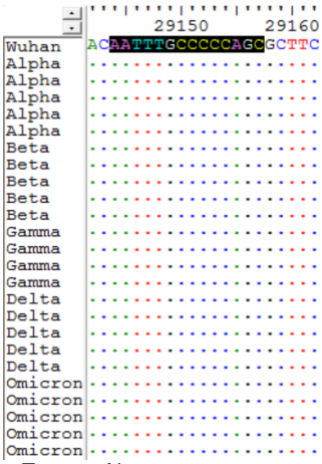
Target: N gene

Oligo: Fn1



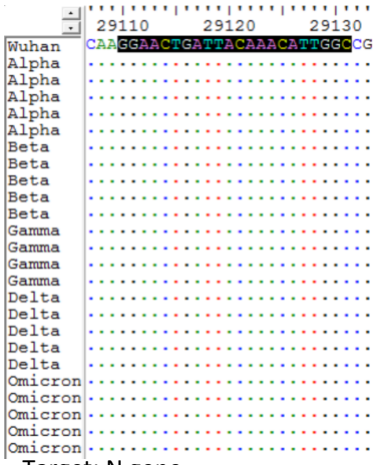
Target: N gene

Oligo: Fn2



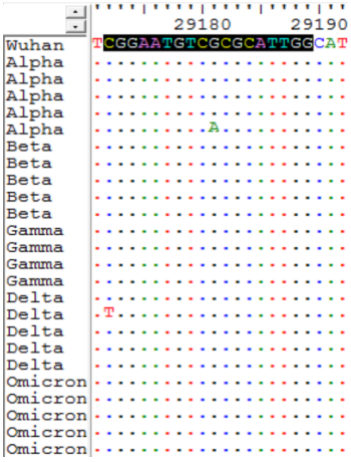
Target: N gene

Oligo: Fn3



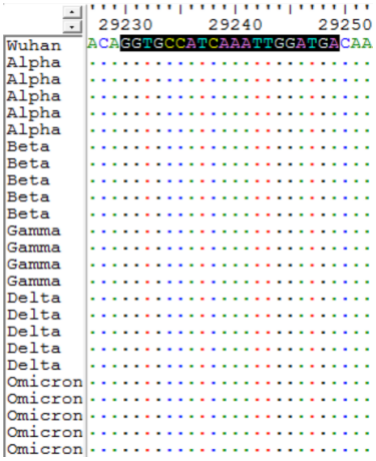
Target: N gene

Oligo: Rn1 (anti-sense)

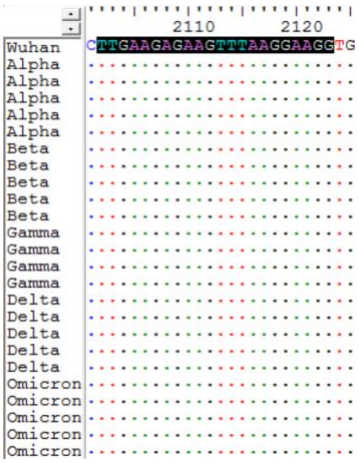


Target: N gene

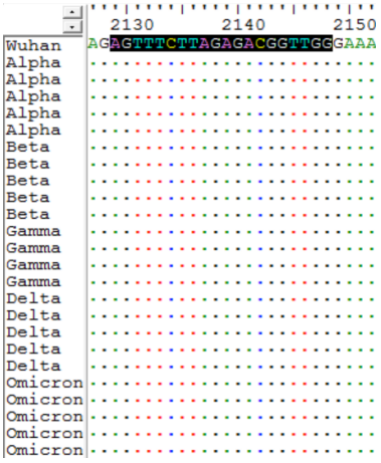
Oligo: Rn2 (anti-sense)



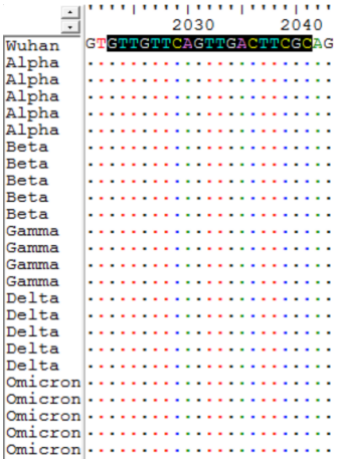
Target: ORF1ab
Oligo: Fcb1



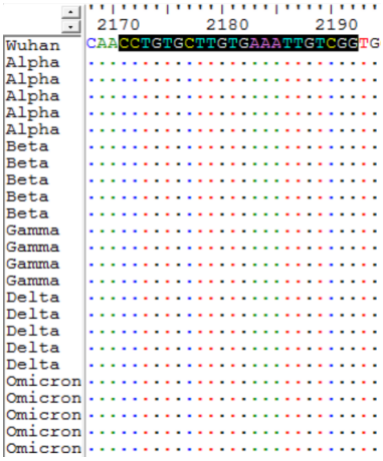
Target: ORF1ab
Oligo: Fcb2



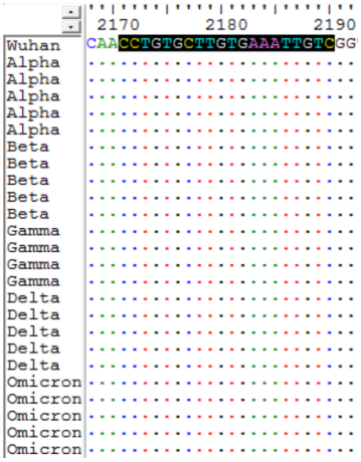
Target: ORF1ab
Oligo: Fcb3



Target: ORF1ab
Oligo: Rcb1 (anti-sense)

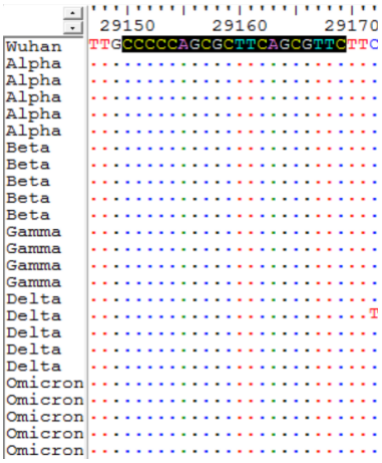


Target: ORF1ab
Oligo: Rcb2 (anti-sense)



Target: N gene

Oligo: N_crRNA



Target: ORF1ab

Oligo: ORF1ab_crRNA

