

Technical Brief

May 21, 2021

**Emerging SARS-CoV-2 Variants
and Detection by the Lucira COVID-19 All-In-One Test Kit**

The Centers for Disease Control and Prevention (CDC) have highlighted the emergence of five notable SARS-CoV-2 variants of concern¹:

- (1) B.1.1.7 (also known as 20B/501Y.V1 or Variant of Concern (VOC) 202012/01) first detected in UK,
- (2) B.1.351 (also known as 20C/501Y.V2) first detected in South Africa,
- (3) P.1 (20J/501Y.V3) first detected in Japan/Brazil,
- (4) B.1.427 (also known as CAL.20C) first detected in US/California,
- (5) B.1.429 (also known as CAL.20C) first detected in US/California,

Additionally, the World Health Organization (WHO) has classified a new global variant of concern and associated sublineages²:

- (6) B.1.617 including B.1.617.1, B.1.617.2, B.1.617.3 (also known as double or triple mutant) first detected in India

Lucira Health performs routine surveillance of emerging SARS-CoV-2 strains by periodically evaluating *in silico* reactivity against sequence databases. These evaluations have shown that these variants are reactive to the Lucira COVID-19 All-In-One Test Kit. The Lucira Health assay targets two non-overlapping regions of the N gene. Hence the detection region is unaffected by the mutations in the spike protein of SARS-CoV-2 in the variant strains. As these particular viral strains become commercially available, Lucira Health intends to perform testing to confirm detection of these strains.

Lucira Health will continue to monitor the situation with emerging variants of SARS-CoV-2.

If you have any questions on the above, please reach out to Technical Support at techsupport@lucirahealth.com.

¹<https://www.cdc.gov/coronavirus/2019-ncov/more/science-and-research/scientific-brief-emerging-variants.html>

²<https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---11-may-2021>