

Technical Brief

July 1, 2021

Emerging SARS-CoV-2 Variants

and Detection by the Lucira COVID-19 Check-It and All-In-One Test Kits

The Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO) have highlighted the emergence of four notable SARS-CoV-2 Variants of Concern^{1,2}:

- (1) Alpha (also known as B.1.1.7) first detected in UK,
- (2) Beta (also known as B.1.351) first detected in South Africa,
- (3) Delta (also known as B.1.617.2) first detected in India,
- (4) Gamma (also known as P.1) first detected in Japan/Brazil,

Additionally, a Variant of Interest has been identified to be rising in prevalence:

- (5) Lambda (also known as C.37) first detected in Peru

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 Check-It and All-In-One Test Kits. 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/variants/variant-info.html>

²<https://www.who.int/publications/m/item/weekly-epidemiological-update-on-covid-19---29-june-2021>