SARS-CoV-2 (COVID-19) Associated Variant Testing

Please find below the latest Biobot targeted variant detection reporting results. For more information about our variant detection program, you can visit our Variant FAQ page at https://bit.ly/3ciZxFr. This resource can also be shared with stakeholders in your community to help them better understand our process and your variant detection results. If you have questions about your results, please send a message to us at support@biobot.io.

Kit ID: KIT-15981

Sampling location: Carmel Area WD (CA) - Facility Influent

Sample collection date: 2021-04-13

| Mutation | SARS-CoV-2 associated variant | Variant-associated mutation |
|----------------|---|-----------------------------|
| A570D | B.1.1.7 | DETECTED |
| 69-70 deletion | B.1.1.7 and minor regional variants not in the US | DETECTED |
| Y144 deletion | B.1.1.7 | DETECTED |

VARIANT DETECTION METHODOLOGY

The assay we have implemented targets three of the key mutations that characterize the B.1.1.7 variant, the SARS-CoV-2 variant first detected in the UK. These three mutations are highly specific to B.1.1.7 and are largely not present in other variants. For each mutation, we provide detection results for the mutation that is found in B.1.1.7. If one of these variant-associated mutations is detected in your sample, this indicates an increased risk of presence of B.1.1.7 in your community. If two or three of these variant-associated mutations are detected in your sample, this indicates that B.1.1.7 is likely already circulating in your community. These results are summarized in the table above.

The limit of detection for this assay is substantially higher than for our standard SARS-CoV-2 qPCR method. Therefore, **a non-detection does not necessarily indicate the absence of B.1.1.7**, but rather means that the variant was potentially not present at high enough levels to be detected by this assay.