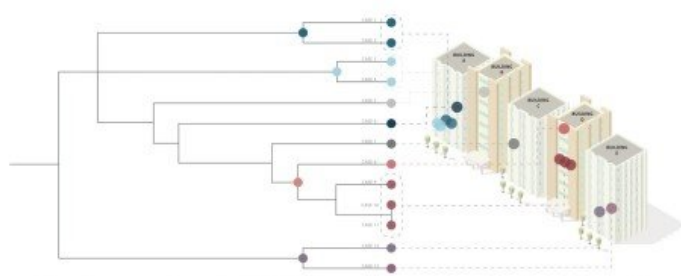


Lucence announces world's first assay kit for profiling SARS-CoV-2 sgRNA

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SARS-CoV-2 sgRNA is a recognized marker of active viral replication

DeepMARK™ Can Pinpoint Unseen Transmission Paths to Help Link Cases



13 cases from one community were analyzed. Individual viral genomes were visualized using a phylogenetic tree to identify transmission patterns. Viral genomes that are more closely related could be accurately linked to their physical locations in each building. The data from DeepMARK™ further differentiates the patients into specific clusters, indicating multiple transmission paths within a single community.

Credit to : Teo AKJ, Hsu LY, et al. (manuscript in preparation) 2020.

Molecular diagnostics company Lucence based in Singapore has announced the availability of the world's first assay kit to directly profile SARS-CoV-2 subgenomic RNA (sgRNA), a marker of active viral replication, from clinical samples.

DeepMARK™ utilizes Lucence's proprietary ultrasensitive next-generation sequencing (NGS) technology, AmpliMARK™, to concurrently detect and analyze the genome and transcriptome of SARS-CoV-2.

Pinpointing sources of unlinked SARS-CoV-2 cases supports rapid public health response. Using high-quality genetic fingerprinting, DeepMARK™ can enable rapid community case tracing by identifying transmission paths, clusters, and viral contagiousness. DeepMARK™'s increased sensitivity also allows for asymptomatic and recovering cases to be more thoroughly evaluated for contagiousness.

For researchers studying contagiousness, SARS-CoV-2 sgRNA is a recognized marker of active viral replication linked with contagiousness and offers several advantages. While viral culture is the gold standard, it is slow, expensive, and requires a biosafety level 3 (BSL3) laboratory, requirements prohibitive for the vast majority of samples. Using DeepMARK™, clinical samples can be safely and efficiently profiled using a simple workflow.

SgRNA as a marker of viral replication is also a well-recognized efficacy measurement in SARS-CoV-2 vaccine development. Thus, comprehensive sgRNA profiling by DeepMARK™ could facilitate more efficient vaccine discovery.

DeepMARK™ is part of Lucence's suite of SARS-CoV-2 molecular diagnostics. Lucence also makes the SAFER™ Sample Kit, a saliva stabilization kit with reported 36% higher sensitivity for detecting COVID-19 compared to nasopharyngeal swabbing.