

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



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.